HOW UNDERGRADUATE MUSIC SCHOOLS ADDRESS MUSIC PERFORMANCE ANXIETY: A MULTIPLE CASE STUDY

A Dissertation submitted

by

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November, 2016

to

School of Professional Psychology

UNIVERSITY OF THE ROCKIES

Upon the recommendation of the Faculty and the approval of the Board of Trustees, this Dissertation is hereby accepted in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

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How Undergraduate Music Schools Address Music Performance Anxiety:
A Multiple Case Study

by

Craig Robert Jordan

Abstract

Music performance anxiety (MPA) is problematic for students within undergraduate music schools due to the important role that performing has for undergraduate musicians' academic progress and subsequent career trajectories. A preponderance of the available literature suggested that MPA issues are highly prevalent within the culture of undergraduate music schools and that few of these institutions have implemented programs and policies that sufficiently address these issues. The purpose of this multiple case study research was to determine how undergraduate music schools address MPA by examining academic catalogs and relevant course syllabi, and through interviewing curricula administrators, primary instrumental instructors, and licensed mental health care clinicians working in university mental health clinics. The study sample included 19 participants representing 14 undergraduate music schools within nine states in the United States, 14 academic catalogs and two course syllabi. Findings suggest that few undergraduate music schools have implemented MPA-specific programs and policies that sufficiently address this issue and that students' primary instrumental instructors are their primary resource for addressing MPA issues. This is concerning because most of these educators lack the specialized training necessary for treating MPA. A conceptual model of how undergraduate music schools address MPA was developed based upon the findings.

Keywords: Music Performance Anxiety, Undergraduate Music Schools, Multiple Case Study



ACKNOWLEDGEMENTS

Throughout the process of completing this research, there were a number of individuals who were extremely supportive and helpful, and their contributions to the research process were an essential component of success. First and foremost, I would like to acknowledge my dissertation chair, Dr. Mark Arcuri, for his continued and ongoing guidance and moral support that were crucial to completing the research. I would also like to thank the rest of my dissertation committee, Dr. Audra Gardner and Dr. Elizabeth Sikora, for their timely support and insights along the way. One of the most difficult challenges that had to be overcome in conducting this research was gaining access to participants. I want to thank Julie Johnson at the College Music Society (CMS) for her help in creating and distributing a recruitment email to the membership of CMS that allowed the research to move forward. I also want to acknowledge the participants who took time out of their busy schedules to provide their insights into how undergraduate music schools address MPA. I would also like to acknowledge my parents for their continued support and for teaching me the importance of hard work and to never give up. I also want to thank Jen for her love, unwavering support, belief, and technical assistance throughout the last seven years.



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CHAPTER I: INTRODUCTION

One of the great thrills of live music performance is that it affords the musician the opportunity to transcend the notes within the musical score and communicate the sheer joy and expression of music with members of a live audience. The countless hours of honing and refining one's musical skills are a necessary component of fulfilling one's dream of becoming a performing musician. For some musicians however, even those whose musical skills reach virtuosic levels, a pronounced fear or apprehension of public performances prevents these individuals from fully sharing their musical gifts with others. For these individuals, no matter how skilled they become within the solitude of the practice environment, their musical abilities deteriorate under the pressures that are associated with high-stakes musical performances.

While there are several types of performance anxiety that inhibit all types of performers from public speakers, test takers, athletes, to dancers, a highly prevalent form of performance anxiety that is specific to musicians is known as music performance anxiety (MPA). MPA issues are multidimensional in nature, and the broad range of its symptoms can manifest physically, cognitively, emotionally, and behaviorally. In moderate to severe cases, MPA can inhibit an otherwise talented performer's chances of experiencing peak performances or of sustaining a career as a performing musician.

MPA is not generally perceived as a serious condition by those from the outside looking in, and this viewpoint may be propagated by the fact that it is not a recognized disorder within the *Diagnostic and Statistical Manual of Mental Disorders Fifth Edition* (DSM-5; American Psychological Association, 2013). At severe levels, however, MPA may have serious implications for musicians that resonate well beyond the stage and can disrupt



their lives, impede their personal growth and development, and compromise their well-being and livelihood (Kenny, 2011). For those whose aspirations are to pursue higher level music education with the hope of becoming a professional performing musician, the topic of MPA is an important consideration.

For developing musicians who pursue higher-level education in the hopes of achieving a career as a performing artist, this debilitating form of performance anxiety can impede academic progress and, in some cases, result in abandonment of one's dreams and career aspirations. Although preparation, musical proficiency, and skill on one's instrument are vital to a musician's capacity to excel in the context of public, high-stakes performances, there is an undeniable psychological component that also needs to be addressed within the training and educational experiences of developing musicians. However, addressing the psychological components of musical performance is currently the exception rather than the rule in a great many undergraduate music performance degree programs, and this oversight may contribute to why MPA is a prevalent issue among amateurs, undergraduates, and professional musicians alike.

Background of the Study

MPA seems to be viewed by music educators as a mild nuisance that negatively influences an otherwise healthy, well-adjusted individual, and it is not generally viewed as a serious psychological disorder. Kenny (2011) suggested that MPA has been largely conceptualized as a focal condition that is experienced by performers who are otherwise psychologically healthy individuals. Within the context of conservatories and undergraduate music schools, MPA is widely accepted as a normal part of the culture, and students are often expected to cope with it on their own (Kuan, 2012; Patston, 2014). This failure to recognize



that MPA is more than a normal issue and could signal other psychological issues within the individual has been the status quo for quite some time, and the prevailing view has been that it exists in otherwise mentally healthy individuals. However, recent research findings have begun to show that MPA overlaps with other well-known disorders, and the alternative viewpoint is that above mild intensity levels, MPA can be a manifestation of several other clinically recognized disorders (Kenny, 2011; Toosi & Taghavi, 2015). These can range from social anxiety disorder (SAD), general anxiety disorder (GAD), panic disorders, and the depressive disorders.

This more contemporary conceptualization of MPA is gaining ground, and many psychology professionals are now beginning to give voice to a philosophy that places moderate to more severe levels of MPA as an indicator that the individual is likely experiencing comorbid psychological disorders. The intensity levels of MPA issues vary greatly between individuals, and at the lowest end of the continuum, MPA can be easily overcome, while more severe cases can be fully debilitating and make public performances unbearable. In these more serious MPA cases, the impact is much more than a mere nuisance and can signal a need for professional psychological assistance (Kenny, 2011).

Statement of the Problem

MPA is a multidimensional and widespread issue among undergraduate music students that is associated with a wide range of music performance contexts that are contingent upon students' academic success and includes competitions, auditions, recitals, and examination juries. The wide range of symptoms vary among those suffering its effects, but normally there are cognitive, physical, emotional, and behavioral components that are interactive and can be highly destructive to a musician's capacity for public performances



(Kenny, 2011; Osborne, Greene, & Immel, 2014). The general problem is that prevalence rates of MPA are substantial among undergraduate music performance students, and if these issues are not properly addressed, MPA can have negative implications for these individuals' psychological and physical health, academic progress, and professional career trajectories. Research findings have consistently demonstrated that nearly 25% of undergraduate music performance students experience MPA at intensity levels that are severe enough to negatively impact high-stakes musical performances and impede their academic progress (Osborne et al., 2014; Schneider & Chesky, 2011).

Undergraduate music performance students are reliant on their ability to perform to their capabilities under the pressures that are associated with high-stakes musical performances, which means that MPA is a highly topical issue for this population. Research examining the impact of MPA on undergraduate music performance students has demonstrated that a majority of scholars believe that MPA issues have been a significant influence in disrupting students' performances during competitions, recitals, auditions, and examination juries (Kuan, 2012; Osborne et al., 2014; Schneider & Chesky, 2011). The psychological component of performance is widely acknowledged by performing artists and music educators alike; yet, formally addressing this aspect within the contemporary music pedagogy is commonly overlooked.

The specific problem is that few undergraduate music schools have implemented specialized coursework into music performance curricula that fully prepares students to effectively cope with MPA issues. Assisting undergraduate music performance students to overcome the debilitating effects of severe MPA issues is one of the most important challenges facing today's undergraduate music schools (Kuan, 2012). Montello (2010)



suggested that the psychological components of music performance play an influential role in performance outcomes and it is necessary for collegiate music schools to address this within their undergraduate music performance curricula. While there is agreement among leading MPA researchers that MPA issues can have serious consequences for undergraduate music performance students, few collegiate music schools provide specialized coursework that adequately addresses MPA (Kuan, 2012; Patston, 2014). Failure to properly address MPA within the pedagogy of undergraduate music performance curricula can have a number of adverse implications for students.

Among the physical manifestations that are widespread among musicians who experience MPA are that the individual loses the ability to relax due to perceiving the performance environment as a threat, and this results in high levels of tension throughout the body. Hildebrandt, Nubling, and Candia (2012) suggested that performance anxiety can trigger a wide range of physical health issues because it is associated with increases in muscular tension throughout a performer's body, and this strain can encourage the emergence of muscular strains and overuse injuries that are widespread among student-musicians. In addition to contributing to physical and psychological health concerns, other negative implications of MPA issues among students are poor exam performance, inferior auditioning skills, poor grades, low levels of self-confidence and self-esteem, and a predisposition to avoid high-stakes music performance contexts (Studer, Gomez, Hildebrandt, Arial, & Danuser, 2011).

The lack of sufficient training programs and coursework that is focused on preparing undergraduates to cope with MPA issues can also lead some of these individuals to engage in maladaptive coping behaviors. Primary among these contraindicated coping strategies that



are widespread among undergraduate music performance students are substance-based coping behaviors. Studer et al. (2011) reported that the number of undergraduate music students who respond to MPA issues with substance-based coping methods is cause for concern given the risks of addiction and the negative impact that the habitual use of tobacco, alcohol, prescription medications, and illicit drugs can have on an individual's health. Over half (54%) of undergraduate music students reported that they viewed the use of tranquilizers and beta-blockers to be an acceptable way to deal with MPA, and 10% of these students responded that in certain instances, the use of illicit drugs would be justifiable.

A great deal of the available literature suggested that undergraduate music schools do not sufficiently address MPA issues within music performance degree programs. MPA is rarely addressed within undergraduate music performance curricula, and although many faculty members are fully aware of its negative impact on students, little has been done in regards to correcting this issue (Kuan, 2012; Patston, 2014). As of August 2016, no other research has been located that examines how MPA issues are addressed within undergraduate music schools.

The research study presented here examined the perspectives of curricula administrators, faculty members who are primary instrumental instructors and who provide psychological guidance to undergraduate music performance students, and where applicable, licensed mental health care professionals working within university mental health clinics who provide treatment. This research study represents a unique approach to the research problem as it attempted to identify if there are existing programs, policies, classes, and intervention strategies that are in place within a diverse range of undergraduate music schools within the United States. By interviewing administrators and faculty who oversee



curriculum design, primary instrument faculty, and where applicable, licensed mental health practitioners working within university mental health clinics, the proposed research study addressed the research problem by obtaining rich and descriptive data that helped to develop a deeper understanding of how MPA is addressed within undergraduate music schools. Examining multiple perspectives from key professionals within each participating undergraduate music school and academic catalogs and relevant course syllabi enabled the research study to explore both the formalized coursework requirements for undergraduate music performance students and the individually-tailored intervention strategies that are in use within the music department, or where applicable, university mental health clinics.

Purpose of the Study

The purpose of this descriptive multiple case study was to explore the perspectives of undergraduate music school curricula administrators, primary instrumental instructors, and, where applicable, licensed mental health care practitioners who were working within university mental health clinics in regards to how MPA issues are addressed in undergraduate music schools. The multiple case study research utilized semi-structured interviews in order to investigate the types of programs and policies, if any, that are in place to ensure that students are provided the necessary skills and coping strategies to help prevent MPA issues. In addition to examining the formalized curriculum requirements of each school by reviewing the academic catalogs and relevant course syllabi, the research study also explored the perspectives of licensed mental health professionals working within university mental health clinics in regards to how MPA issues are dealt with outside of the classroom environment. The objective was to examine the individualized and group intervention strategies that are used by primary instrumental instructors, and, where applicable, licensed



mental health care professionals in the treatment of undergraduate music performance students who suffer from MPA issues. Examining the different strategies that are employed by a diverse range of undergraduate music schools in the United States provided data that was utilized in the development of a conceptual model of how undergraduate music schools in the United States address MPA.

These research objectives are aligned with the aforementioned specific problem: MPA is a widespread issue among undergraduate music students, yet few higher-learning institutions have provided their students with the needed coping strategies that fully prepare them to deal with MPA or the pressures that are inherent within high-stakes music performances (Kuan, 2012; Montello, 2010; Patston, 2014). A qualitative approach helped the researcher to obtain something beyond mere numerical data by allowing participants to explain the phenomenon under investigation in rich, descriptive detail and in their own words. It is doubtful that a quantitative research design would have allowed the researcher to gain a full understanding of how MPA is addressed within undergraduate music schools, and conducting semi-structured interviews permitted each participant to provide context to the data that were collected.

No related research has been conducted on the topic under investigation; therefore, a descriptive multiple case study approach was selected so that the researcher could compare and contrast the ways that several diverse undergraduate music schools address MPA. The multiple case study tactic provides the researcher with an opportunity to compare the rich and descriptive data between cases, which may allow for a deeper understanding of the topic under investigation (Baskarada, 2014; Morse & McEvoy, 2014; Yazan, 2015). By comparing how several undergraduate music schools address MPA utilizing a descriptive,



multiple case study approach, the research study's findings may help to advance the fields of music education and performance psychology.

The objective of the study presented herein was to determine if there is agreement in the methods that are currently utilized to address MPA in a wide range of undergraduate music schools. The findings may be of potential benefit to undergraduate music schools by raising awareness about the prevailing strategies that are in use to effectively address MPA. The research could also inform how undergraduate music schools and their corresponding university mental health clinics can collaborate to better assist future undergraduate music students who subsequently experience MPA issues. Applying the research findings to other fields, like sport and performance psychology, may allow such professionals to develop new strategies and applications that can be applied to better address the issue of MPA within undergraduate music schools.

Importance of the Study

There is a need for this research study as a great deal of the available research has promoted the topic of MPA within undergraduate music schools as an area for further research. Patston (2014) suggested that it is circumspect that anxiety disorders, such as MPA, are accepted as routine within undergraduate music schools, and this warrants future research examining MPA within the culture of advanced music education institutions.

A huge gap also exists within this literature in regards to how MPA issues are addressed within undergraduate music schools. Kuan (2012) recommended that future research is needed in order to examine the lack of compatibility that currently exists between the availability and the necessity of training programs and classes that address MPA prevention and coping strategies for undergraduate music performance students. A preponderance of the



available MPA literature suggested that there is a need for higher education music curricula to go beyond the standard music pedagogy and include the psychological components of music performance and embrace the use of psychological skills training techniques that can assist students in managing their performance anxiety issues (McGrath, 2012; Montello, 2010; Papageorgi et al., 2010; Patston, 2014).

The few studies that have been conducted to date that focus on the implementation of psychological interventions within undergraduate music schools are quantitative in nature and are focused on the efficacy of mental skills training programs for musicians who are experiencing MPA issues (Clark & Williamon, 2011; Montello, 2010; Osborne et al., 2014). Clark and Williamon (2011) questioned why mental skills training programs are in widespread use with athletic populations yet are rarely applied within the performance contexts of music and the performing arts. By providing a detailed examination of how undergraduate music schools are currently addressing MPA, the research study's findings were essential to the development of a conceptual framework that may provide a needed catalyst to spark further research in this area.

Conceptual Framework

The research study presented herein was the first of its kind to be conducted, and there are no preexisting conceptual frameworks that have been developed to fully explain how MPA is addressed within undergraduate music schools. There are, however, conceptual frameworks that have been developed to help professionals in understanding the multidimensional construct of MPA. One of the most comprehensive conceptual frameworks of MPA was conceived by Papageorgi, Hallam, and Welch (2007; See Figure 1). Within this conceptualization of MPA, the relatedness of a diverse range of constructs interact before,



during, and after performance to represent how the cycle of MPA is perpetuated among musicians.



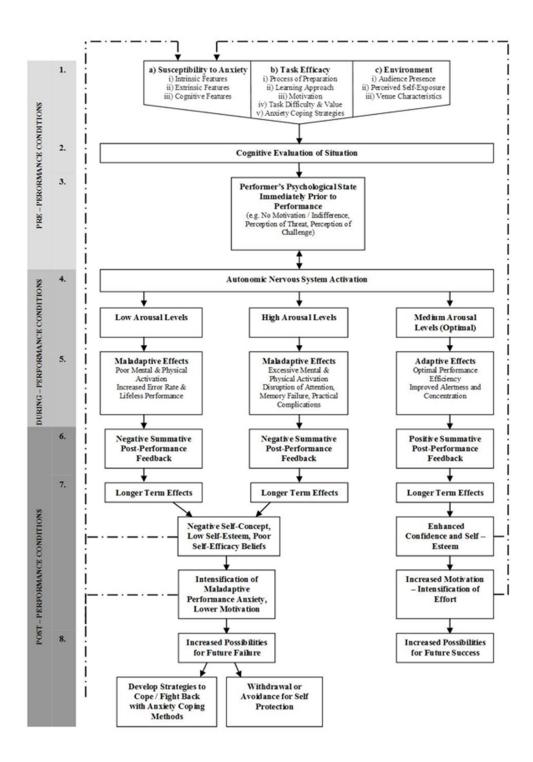


Figure 1. Conceptual framework of music performance anxiety. Reprinted from A Conceptual Framework for Understanding Music Performance Anxiety (p. 94), by I. Papageorgi, S. Hallam, & G. F. Welch, 2007, Research Studies in Music Education. Copyright [2007] Reprinted with permission (Appendix A).



PrePerformance Characteristics

Among the primary components that are influential to the onset of MPA are the performer's predisposition to experiencing anxiety, the specific features of the music to be performed and the individual's belief in his or her ability to execute the task, and the specifics of the performance context. A great deal of the MPA literature suggested that a musician's personal characteristics play a large role in influencing the likelihood that an individual will experience MPA (Kenny, 2011; Osborne et al., 2014; Papageorgi et al., 2007). The conceptual framework of MPA includes the musician's innate qualities of age, gender, personality type, trait anxiety levels, apprehension level in regards to being negatively evaluated, self-confidence levels, and self-esteem levels (Papageorgi et al., 2007). These combine with the performer's preparedness, motivational state, coping abilities, and the environmental characteristics, such as audience features, the performance setting, and whether the performance occurs within an ensemble or solo context. Each of these interactive components will contribute towards influencing how a musician evaluates the performance scenario and his or her psychological status just prior to the event (Papageorgi et al., 2007).

During Performance Characteristics

Each of the aforementioned constructs then contribute towards the level of activation of the performer's autonomic nervous system, which will in large part determine if there are shortages, excesses, or if the individual's during-performance arousal levels will be ideal.

One caveat to the conceptual model presented by Papageorgi et al. (2007) is that it regards arousal as a one-dimensional construct. Kenny (2011) suggested that arousal should be perceived as a multi-dimensional construct, and she cited a number of theories that more



accurately explain a performer's level of arousal. In Chapter II there is a discussion about Attentional Control Theory, Distraction Theory, and the Multidimensional Conceptualization of Anxiety and Execution Focus Theory, and how these philosophies help to explain the underlying mechanisms that influence arousal and offer a more comprehensive explanation of its multidimensional nature.

During performance, MPA issues can largely be determined by how the performer interprets his or her mental and physiological arousal levels and whether the arousal disrupts the ability of the individual to focus on the task of performing (Broomhead & Skidmore, 2014; Kenny, 2011; Papageorgi et al., 2007). How arousal influences the performer is also a vital element in how MPA will influence the performance outcome. Within this section of the conceptual framework, the way in which the performer interprets his or her arousal levels and the corresponding intensity level of this anxiety can be significant in determining whether MPA will be facilitative or debilitative to the musician's performance.

Post-Performance Characteristics

Within the conceptual framework of MPA, the cognitions, ruminations, and self-evaluations of the performer subsequent to a performance can also play a key role in perpetuating the cycle of MPA. Papageorgi et al. (2007) suggested that when a performer negatively evaluates his or her performance outcome, there is a potential for lowered self-esteem and self-efficacy that increases the likelihood for poor performances in future performances. The conceptual model provides two potential outcomes: the performer can overcome past performance failures by engaging in MPA coping strategies or the performer will engage in avoidance of future performance situations. Papageorgi et al. also suggested that positive performance outcomes serve to bolster the performer's self-esteem and



confidence levels, and this helps to increase the performer's motivation to engage in future music performance opportunities.

Research Questions

In order to gain a deeper understanding of how MPA is addressed within undergraduate music schools, asking the appropriate research questions that align with the aforementioned purpose of the study and the research study's objectives are key. The central research questions of the research study, along with any sub-questions, included:

- Central Research Question 1: What, if any, programs and policies do undergraduate music schools have in place to ensure that students are provided with sufficient MPA coping and prevention strategies?
 - Sub-Question A: What other resources are available within undergraduate music schools to help students who are experiencing MPA issues?
 - Sub-Question B: In lieu of formalized coursework, how do undergraduate music schools ensure that music performance students are provided with sufficient training that enables them to cope with MPA?
- Central Research Question 2: What are the perspectives of curricula administrators, primary faculty members who provide psychological guidance to students and, where applicable, licensed mental health practitioners working within university health clinics in regards to how MPA is addressed within undergraduate music schools?
 - Sub-Question A: What types of agreement exist among the responses of participants in regards to the most effective strategies that are utilized in undergraduate music schools to address MPA issues?



Overview of Research Design

Given the nature of the research topic, a qualitative research design was appropriate because it allowed participants to provide rich and detailed descriptions of the phenomenon under investigation. Specifically, the research study utilized a descriptive, multiple case study approach in order to investigate how MPA is addressed within undergraduate music schools. Case study methodology lends itself to investigation or the evaluation of a program(s), and the detailed and robust data can help to provide a more comprehensive and contextual understanding of the experience under investigation (Baskarada, 2014; Yazan, 2015).

The population selected were undergraduate music school administrators who oversee the development and design of music performance curricula, primary instrumental instructors who provide psychological guidance to students, and, where applicable, licensed mental health professionals working within university mental health clinics who provide individualized treatment or group-based interventions to students enrolled within these programs. The convenience sampling strategy was utilized, yet it included a set of qualifications that each participant must possess in order to be eligible for participation. The participants represented a sampling of public and private undergraduate music schools from within the United States. Here, convenience-based sampling was utilized and the schools were selected on the basis of an internet search for undergraduate music schools within the United States. The convenience sampling approach is primarily based upon the concept of allowing a researcher to obtain easy access to research participants (Battaglia, 2008).

Another avenue for accessing participants that was utilized was the distribution of a recruitment email that was sent by the College Music Society (CMS) to its membership (see



Appendix B). This strategy helped to streamline the recruitment process and allowed access to collegiate music administrators, primary instrumental instructors, and licensed mental health care practitioners working in university mental health care clinics throughout the United states. The first eight curricula administrators and faculty members who provide psychological guidance to students, or where applicable, mental health care professionals providing treatment within university mental health care clinics were selected for participation. Additional individuals who consented to participate were used as backup in case of participant drop-outs, or if data saturation was not realized in analyzing the data from the original participants.

Data collection was multidimensional and included digitally recorded, semi-structured interviews with one curricula administrator and one primary faculty member or licensed mental health care professional from each undergraduate institution that participated in the study, and this included relevant documents, such as 14 academic catalogs, two course syllabi, and the researcher's field journal entries that were made following each interview. The primary instrumentation was the semi-structured interview protocol (See Appendix C), which underwent preliminary testing via a small pilot study that was conducted to determine the efficacy of the questions in relation to the objectives of the proposed research study prior to target sample recruitment. The pilot study is fully discussed within Chapter III.

In regards to data analysis, the case study approach lends itself towards a constructivist paradigm as the researcher subscribes to the idea that research knowledge is an amalgamation of the researcher's interpretations of the data and the participants' portrayal of their understanding of the topic under investigation. A constructivist perspective is a



widespread epistemology within the case study approach as a majority of these researchers believe that knowledge is created through their elucidation and rendering of the research data (Yazan, 2015). The constructivist paradigm emphasizes the importance of establishing a positive rapport between the researcher and participants. The researcher played a primary role within both the data collection and data analysis phases of the research, and facilitating open and honest communication with each participant was a quintessential element of creating trustworthiness in the subsequent findings. Data analysis was computer-assisted using NVivo software in order to organize and code the emergent themes and data clusters, and this process will be fully discussed within Chapter III.

Definition of Terms

Conceptual Model of Music Performance Anxiety

The Conceptual Model of Music Performance Anxiety presents a detailed explanation of each of the components that interact before, during, and after musical performance to collectively explain the experience of MPA (Papageorgi et al., 2007).

Coping

The capacity to effectively cope with anxiety and stress allows the individual to successfully manage the psychological and physiological elements of high-stakes performance situations (Hanin, 2010).

High-Stakes Music Performance

A high-stakes music performance is any public performance where the primary purpose is to evaluate the performer and his or her execution of a specific piece of music and can take the form of an audition, jury-examination, or any other performance context that is viewed as important or stress-inducing (Osborne et al., 2014).



Music Performance Anxiety (MPA)

MPA is a persistent and ongoing apprehension towards placing oneself within the context of public performances where the performer worries or experiences actual impairment of one's performance capabilities that are unjustified based upon the performer's true abilities, training, and preparedness for the performance (Kenny, 2011; Osborne et al., 2014; Patston, 2014; Sarbescu & Dorgo, 2014).

The Psychological Component of Musical Performance

An often overlooked component of musical performance that is lacking within a great deal of the contemporary music pedagogy and comprises the performer's cognitions, emotions, and performance mindset, which can be highly influential to performance outcome (Broomhead & Skidmore, 2014; Cox, 2010)

Intensity Level

In its milder manifestations, MPA can help to prepare a musician for optimal performances, while at higher levels of severity, it can prove debilitating by distracting the performer from a task-oriented focus and create negative cognitions, emotions, and behavioral responses to the performance context (Spahn, Walther, & Nusseck, 2015).

Assumptions, Limitations, and Delimitations

An important assumption of this research study was that each participant would be motivated to provide truthful and factual information during the course of their participation in the study. The semi-structured interview protocol (see Appendix C) and the strategies that were implemented to ensure the confidentiality of participants (see Appendixes D, E, and F) were put in place to help participants feel at ease in providing truthful explanations in regards to how they perceived the phenomenon under investigation. Another assumption was that by



spending the time to build trust and rapport with each participant prior to conducting the semi-structured interview, the interviewer created an ideal context in which truthful and accurate interview responses would be obtained. The primary objective during the data collection process was to provide each participant with a safe and confidential environment in which to voice their perceptions on how their undergraduate music school addresses MPA and limit the potential for untruthful responses that were intended to portray the interviewee or their school in a socially desirable light.

One important limitation regarding the research study lies in the relatively small sample of participants that participated and in limiting the geographical location of undergraduate schools that were solicited for participation to nine states within the United States. This may limit the transferability of the study's findings to undergraduate music schools within these specific geographical areas. However, the findings of the research study have merit and may prove to be useful in other music education programs in other geographical locations. The study's findings also have validity and applicability in helping consumers of the research in understanding how MPA is addressed in other undergraduate music schools beyond those whose employees participated in the study.

Another possible limitation was that the researcher has worked as a music educator and his past experiences could have potentially caused undue amounts of researcher bias to influence the participants' responses during interviews, and this could have distorted the study's findings. In order to address this, the researcher made a concerted effort to remain unbiased during the data collection process by maintaining a neutral body language and vocal demeanor that did not influence participant responses during the semi-structured interviews.



Evaluating the digital recordings and text transcriptions following each interview helped the researcher to adjust and maintain a neutral demeanor in subsequent participant interviews.

One of the delimiting factors of the research study was that a relatively small sample of participants from a specific geographical region was solicited to participate within the study. Even though the researcher attempted to generate a high level of diversity among the participants and the undergraduate music schools they represented, it is unlikely that the findings are unilaterally applicable to undergraduate music schools outside the identified geographical area. Another delimiting factor is the inclusion criteria for participation within the study. Requiring at least one year of professional experience for curricula administrators and primary instrumental instructors and one year of professional experience and state licensure for clinicians working within university mental health clinics for the study's sample is a delimiting factor of the proposed research study. The inclusion criteria, however, were necessary as this helped to ensure the professional competencies and level of expertise of the proposed research study's participants, which helped to ensure the trustworthiness of the data.

Summary

This chapter has provided a detailed description of the specific research problem that exists in regards to the importance of how MPA is addressed within undergraduate music schools. The specific problem is that few undergraduate music schools have implemented specialized coursework into music performance curricula that fully prepares students to effectively cope with MPA issues. The objectives of the research were also presented by providing recent literature that documents and supports the need for the research. The research questions of the multiple case study were also outlined in order to highlight how the



research study investigated the programs and policies that are in place within undergraduate music schools for the purpose of addressing MPA. A deeper understanding of the strategies that are currently in place for addressing MPA within undergraduate music schools can act as a catalyst for the further development and design of more effective intervention strategies that could prove beneficial to undergraduate music schools and their students.

The conceptual framework of MPA forms the underpinning of the research study and was presented within the introductory chapter to provide readers with a more complete awareness of the multi-dimensional construct of MPA, the factors that contribute towards its onset, and the multiple channels that it navigates before, during and following the performance in order to perpetuate itself. The shortcomings of the conceptual framework of MPA were also discussed in order to help familiarize the reader with the primary theories that help to explain the dynamic nature of arousal and how it can impact performance outcomes.

Chapter II will contain a discussion of arousal, anxiety, fear, and the flight or fight response along with a comprehensive review and synthesis of the current and seminal MPA literature. Chapter III will include an outline of the specific details of the methodology that will be used to carry out the research study.



CHAPTER II: REVIEW OF THE LITERATURE

The literature review begins by examining the relevant research as it relates to anxiety, arousal, fear, and the flight or fight response in order to provide a sufficient background of the physiological and psychological processes that are integral to the MPA experience. Then, social anxiety disorder (SAD), generalized anxiety disorder (GAD), and the panic disorders are examined in order to provide perspective on the different subtypes of performance anxiety disorders, and to show how MPA may overlap with these other clinically recognized psychological disorders. Finally, this chapter includes a full review of the MPA literature beginning with its etiology and symptomology, causes and triggers, and an overview of the prevailing treatment strategies used in other performance domains to show how these strategies have been employed for MPA issues in the field of music performance. The literature review concludes by providing a detailed discussion and synthesis of the available literature that pertains to how MPA impacts undergraduate music schools and how it influences the students enrolled in these higher-learning institutions.

The review of the literature helps to provide a deeper understanding of the constructs that underlie an individual's ability to execute high-stakes musical performances and of how these paradigms may contribute to the development of MPA. This will lay the foundations for the methodology, results, and discussion chapters where the perceptions of curriculum administrators who design music performance degree programs, those of primary instrumental instructors, and mental health care practitioners who provide individual counseling to undergraduate music performance students with MPA issues will be examined.

The first primary research question calls for an examination of how undergraduate music performance curricula address MPA through mandatory coursework and training



workshops that are provided to all students. Sub questions A and B requires that the research study explore what other ways besides formalized coursework that undergraduate music schools ensure that students are provided with the necessary training to allow them to cope with MPA. Central research question #2 requires exploring the perspectives of curricula administrators, primary instrument faculty, or where applicable, licensed mental health professionals working within university mental health clinics in relation to the programs and policies that are in place within their respective undergraduate music schools for the purpose of addressing MPA issues. Sub question A stipulates that the research examine if there is agreement among participants on the types of effective strategies that are currently being utilized to address MPA in undergraduate music schools.

Search Strategy

The search strategy for the review of germane and scholarly literature for this research topic included searching within a number of search engines and databases. Table 1 displays the primary databases and search terms that were used during this process.



Table 1
Search Engines and Terms Used to Conduct Research.

Search Engines & Databases	Search Terms
Google Scholar	Music Performance Anxiety and Undergraduate Music Schools; Multiple Case Study Design
EBSCOHost (all databases); PsychInfo; Sage Journals Online; Sage Research Methods	Music Performance Anxiety and Undergraduate Music Performance Students; Music Performance Anxiety and Social Anxiety Disorders; Qualitative Research Strategies; Case Studies; Qualitative Data Collection and Analysis
ProQuest (all databases)	Anxiety and Musicians; Stage Anxiety; Music Education and Performance Psychology
Researchgate.net	Psychological Intervention Strategies for Music Performance Anxiety; Social Anxiety Disorder and Undergraduate Music Students
SportDiscuss	Performance Anxiety in Musical Contexts; Fear of Public Performance; Anxiety and Musicians

The reference sections of the scholarly articles that were accessed also served as an additional resource for locating other pertinent research articles. In some cases, the citations that were located within the reference sections of the relevant literature provided the researcher with new resources that were not part of the primary databases that were searched. In addition, a number of recently published textbooks and relevant trade journals were included in the literature review. The trade journals that were important resources were:

Music Education Research, Medical Problems of Performing Artists, The Sport Psychologist, Journal of Applied Sport Psychology, Psychology of Music*, and Music & Medicine. The Qualitative Report website was also a major resource that provided access to scholarly articles that were utilized in the design of the research study.



In several instances, the search process revealed MPA literature that was highly relevant but had been published more than five years ago. Because the specific topic of the research study has not undergone extensive investigation by other researchers, some citations from older sources were included within this document. The reason for this is that the topic of this research study has not produced an abundance of new research since the early 2000s, forcing the inclusion of what may appear to be dated literature but which is, in fact, the most recent scholarly work. The inclusion of the Conceptual Model of MPA developed by Papageorgi et al. (2007) is warranted as it continues to be the most comprehensive conceptualization of MPA available. Undoubtedly, addressing this gap in the literature is necessary, and the inclusion of the germane literature, regardless of when it was published, benefitted the development of the research study presented herein.

Anxiety

As a psychological issue, anxiety is something that impacts nearly everyone at some point in their lives. Valentiner and Fergus (2012) suggested that anxiety disorders are one of the most prevalent psychological issues within the United States and prevalence rates of clinically diagnosable cases are approximately 30%. From an evolutionary viewpoint, anxiety has been conceptualized as part of an innate defense mechanism that helps individuals to address perceived threats, and it often includes feelings of fear, shame, guilt, and self-doubt (Cheng, Hardy, & Markland, 2009). Anxiety results when a performer perceives that his or her abilities are unable to measure up to the performance demands of a given performance scenario (Walker & Nordin-Bates, 2010).

Within much of the literature, anxiety is often associated with rumination and worrying that serves to distract the individual from his or her immediate tasks. Worrying is a



key symptom of anxiety, and within the multidimensional conceptualization of anxiety, it is considered a cognitive aspect that causes the individual to focus on future negative outcomes rather than maintaining a present focus (Cheng et al., 2009). An awareness of the key elements of anxiety and stress are essential to assist the reader in fully comprehending the unique roles that stress and anxiety play in the development of MPA issues.

Anxiety is multidimensional and includes emotional, cognitive, somatic, and behavioral facets that are linked with events that require skill, focus, and self-evaluation (Sinico, Gualda, & Winter, 2012). Anxiety has been conceptualized to be dependent upon the individual's unique qualities and the specific context of the situation where it occurs. Trait anxiety is defined as an individual's overall predilection towards responding to increases in state anxiety, which is variable according to the situation or the existence of a perceived threat. Trait anxiety can also be explained as an individual's vulnerability to experience long-range or enduring anxiety in anticipation of important happenings or to experience an overload of worry as a result of circumstances, interpersonal relationship issues, or high-stakes events (Wristen, 2013).

Much of the available anxiety literature posited that it is the interaction between state and trait anxiety that is highly influential in determining how an individual will respond to the unease of a threatening or anxiety-producing situation. Trait and state anxiety are interdependent, and it is this interaction that can have a major impact on how a person will respond to a perceived threat (Sinico et al., 2012). An individual's responses to anxiety are also multidimensional in nature and include both cognitive and somatic reactions. The somatic responses to anxiety include a wide range of symptoms, and likewise, there are a wide range of cognitive responses that an individual may experience.



Among the common bodily responses to stress and anxiety are increased muscular tension throughout the body, increased heart rate and sweat gland activity, shallow breathing, and trembling while the mental responses range from negative internal dialogue, fear of failure, and a focus on the self rather than performing the task (Cheng et al., 2009).

Increased levels of anxiety can also disrupt an individual's focus and concentration, and this may contribute to poor responses and poor performances. Research findings have shown that when a performer experiences a surplus of anxiety, the increased brain activity within the amygdala is associated with diminished prefrontal control mechanisms that are known to regulate motor movement (Nieuwenhuys & Oudejans, 2012). Anxiety can also act as a catalyst for memories of past experiences to resurface where high levels of apprehension may cause the individual to focus on the self and the presence of distracting negative internal dialogue (Buma, Bakker, & Oudejans, 2015). It is this disruption of attention that may cause anxiety to be so counterproductive to an individual's performance outcomes.

When individuals experience anxiety, focusing on the relevant task becomes more challenging, and the ability to effectively process task-specific cues is diminished and performance generally declines (Nieuwenhuys & Oudejans, 2012). The Attentional Control Theory suggests that performers have a finite amount of attentional focus, and because of this, anxiety can be a destructive force to the execution of a successful performance.

According to this theory, individuals' motor skills performances deteriorate when they focus on any extraneous stimuli, such as those that are threat-related, which leaves less of the attentional resources available for executing skilled motor performance (Nieuwenhuys & Oudejans, 2012).



Anxiety can also cause elite performers to overthink their performance efforts, and this forces a change in the direction of the attentional focus. Execution Focus Theory suggests that expert performers who experience debilitating anxiety levels may refocus their attentional resources inward, and this often leads to the individual attempting to explicitly control skilled motor movements, which disrupts automatic processes (Nieuwenhuys & Oudejans, 2012). Increased pressure to perform can elevate the performer's drive to experience a successful performance, and this may also cause the focus to be drawn inwards in an attempt to manage skill execution, which disrupts the automatic processes and generally causes a regression in skill (Osborne et al., 2014).

The presence of anxiety, however, does not always negatively influence performance, and at modest levels, it can even facilitate optimal performances. One of the important distinctions to be made regarding the way that an individual reacts to anxiety is the manner in which it is interpreted. Walker and Nordin-Bates (2010) suggested that the way in which anxiety is interpreted by the performer can have a more profound influence on performance than the severity of its somatic and cognitive symptoms. If the performer views anxiety as a positive resource that enables performance excellence, it may positively influence the subsequent performance. If, however, it is viewed as destructive to performance, anxiety can negatively impact an individual's performance outcomes.

Athletes in full-contact sports may view their somatic anxiety symptoms as enabling while performers engaged in fine-motor activities like dance and music performance are more likely to think of anxiety as something negative that will detract from their performance accuracy (Walker & Nordin-Bates, 2010). The existence of high levels of somatic anxiety



can be quite disruptive to skilled musical performance, as shaky hands or excessive levels of tension throughout the body can disrupt skilled execution.

It is important to note that the direction of its interpretation can be an important area of focus for the design of effective anxiety intervention strategies, and many successful MPA interventions are based upon teaching the performer to accept anxiety as a naturally occurring component of high-stakes performances. Acceptance and commitment therapy is one of the more promising approaches that have been developed for the treatment of MPA (Juncos & Markman, 2015). This and other contemporary MPA treatment strategies will be examined and discussed within the MPA treatment section that appears later in this chapter.

Arousal

Another element that plays a major role in how an individual reacts to stress and anxiety is arousal. When a person prepares to perform a task, his or her level of arousal can have a major impact on the performance outcome, and each individual has a different ideal level of arousal that facilitates idyllic or peak performances. One of the seminal theories on arousal is known as the Yerkes-Dodson Inverted-U theory, where an individual's performance outcomes are directly related to his or her preperformance arousal levels. Yerkes and Dodson (1908) suggested that the association between execution and arousal is curvilinear and optimal performances occur when moderate arousal levels are present and deficiencies or excessive amounts of arousal commonly result in declining performances. Fazey and Hardy's (1988) Catastrophe theory further postulates that as performers experience more severe levels of anxiety and arousal, their performance execution will incur huge declines that are commonly known as cataclysmic failures or choking.



Among the prevailing models that have been developed to explain how each performer's arousal levels are unique to the individual is Hanin's Individual Zones of Optimal Functioning (IZOF; Hanin, 2010). The IZOF model conceptualizes that each individual has his or her own distinctive ideal arousal level and corresponding set of emotions that promote peak performance and facilitate the occurrence of a flow state (Van der Lei, & Tenenbaum, 2012). A flow state is one in which the performer encounters a combination of positive feelings and an effortless attentional focus during the act of performing a skill that is evenly matched to his or her level of expertise (De Manzano, Theorell, Harmat, & Ullen, 2010).

Severe levels of MPA and flow seem to exist on opposite ends of a continuum and are important constructs to consider when conceptualizing high-stakes musical performance. MPA issues often occur when the performer focuses on the self or the intended performance outcome, while the experience of flow occurs when the individual becomes fully immersed in engaging in the performance task and there is an absence of self-consciousness or self-doubt (De Manzano et al., 2010; Kirchner, 2011). A performer's skilled execution then relies on this ability to enter into an ideal performance mindset, and without the proper coping skills, the countless hours of practicing and preparation for performance can be derailed by the presence of MPA, and this may result in performances that are below the performer's actual skill level. In order to fully understand MPA and its subtypes, it will be useful to see how this form of anxiety may be related to the clinically recognized psychological disorders.



MPA-Related Disorders

One of the most prevalent diagnosable anxiety disorders today is known as social anxiety disorder (SAD) or social phobia, and one of its subtypes is listed as performance anxiety (Bogels et al., 2010). MPA is thought to be a specialized form of SAD or social phobia and is explained as a pronounced apprehension of specific social contexts like music performance where the possibility of negative evaluation from others exists (Biasutti & Concina, 2014). There are many forms of anxiety disorders, but SAD includes a specifier for performance anxiety that encompasses a wide variety of performance domains such as test taking, public-speaking, and musical performance. MPA is regarded by many psychology professionals as a form of social anxiety, and at modest levels of intensity, it is conceptualized as a distinct focal anxiety that does not negatively influence the individual beyond the context of musical performances (Nicholson, Cody, & Beck, 2015).

There is also research that suggested an alternate viewpoint where the experience of MPA is seen as an offshoot of a SAD disorder or a generalized anxiety disorder (GAD) with or without the presence of a panic disorder or depression. Kenny (2011) suggested that the question becomes one where the practitioner must assess if a musician who is experiencing MPA issues is otherwise psychologically healthy or if performance anxiety is an extension of a more significant clinical disorder. A synthesis of the contemporary psychology literature pertaining to the anxiety disorders demonstrates that comorbidity is the rule rather than the exception. While there is a dearth in the research related to MPA and comorbid issues, clinical practice has informed the field to their widespread existence (Kenny, 2011; Kenny & Holmes, 2015).



A brief review of the primary criteria of SAD provides a clinical foundation for conceptualizing MPA as a manifestation of SAD. SAD is an ongoing fear of social or performance circumstances that induces an individual to fear the humiliation that may result from social interactions or public performances (Biasutti & Cuccina, 2014; Valentiner & Fergus, 2012). Primary criteria for SAD includes an ongoing fear of one or more social or performance contexts where the individual dreads being negatively evaluated, humiliated, or embarrassed by his or her actions, and this feared circumstance causes severe anxiety (Biasutti & Concina, 2014; Bogels et al., 2010). Individuals suffering from SAD are often preoccupied with the possibility that they will be evaluated poorly by others during social events, everyday living contexts, and performance contexts (McGinn & Newman, 2013). Within the SAD experience, the individual may suffer apprehensions within the contexts of formalized performances, social contexts where interaction with others is required, or even a fear of being observed while performing their daily activities (Biasutti & Concina, 2014; Nicholson et al., 2015).

MPA could very well be viewed as a specific form of SAD that impacts musicians who fear performing in front of others and the possibility of being negatively evaluated by those attending the performance. At modest levels of severity, MPA may only slightly impair the individual's performance capabilities while at more severe levels it may overlap with SAD and meet the criteria that are necessary for clinical diagnosis (Kenny, 2011; Nicholson et al., 2015). MPA can be severe enough to warrant a clinical diagnosis as a specific subtype of performance anxiety within the category of SAD, and this provides evidence that it should be recognized as a psychological disorder within the DSM-5 as it can be a serious and debilitating issue for individuals engaged in performing arts careers. SAD



may not be the sole psychological disorder that overlaps with MPA, and examining other relevant disorders may help to provide a more comprehensive context in understanding the experiences of those who suffer from it.

MPA, in more serious cases, could also be related to the panic and depressive disorders. Kenny and Holmes (2015) hypothesized that the most severe subtype of MPA includes the existence of a panic-related disorder. The onset of this form of MPA has been explained as deriving from disordered attachment relationships during the performer's early developmental years, and these maladaptive attachments can be instrumental in determining how a musician responds to the performance context. Individuals who suffer the most severe subtype of MPA with panic and depression are more likely to have experienced dysfunctional attachment relationships during their early development and do not acquire a sense of self-assurance (Kenny, 2011; Kenny & Holmes, 2015). These individuals' response mechanisms when confronted with the threat of high-stakes musical performances are then activated by the flawed representations that are encompassed within these past relations with attachment figures (Kenny & Holmes, 2015).

Comorbidity and MPA is an under-researched area; yet, it may be a crucial element in the development of the accurate assessment, diagnosis, and treatment strategies for those who are impacted by this disorder. Compounding the lack of consensus that exists within the MPA literature is the fact that MPA is not a clinically recognized disorder and does not appear within the DSM-5 (Kenny, 2011). The experience of MPA can extend beyond the immediate influence it can have on music performance, and it can have negative implications not only on an individual's music performance career but on his or her psychological health (Barbar, de Sousa Crippa, & de Lima Osoria, 2014). A great deal of the literature suggested



that MPA is viewed as a non-serious issue that does not have serious implications for those musicians who suffer from it, but this view is shortsighted. The psychological consequences of more intense levels of MPA are, from an emotional standpoint, every bit as harmful as a lethal illness due to the negative career implications it can have for the performing musician (Nagel, 2010).

Rather than the prevailing conventions that have perceived MPA as a focal issue that solely pertains to impaired musical performance, it may be more accurate to view MPA as a possible extension of other pathological issues that are experienced by musicians. The phenomenon of MPA has been linked with the presence of comorbid disorders that include SAD, GAD, panic disorder, and the depressive disorders (Barbar et al., 2014; Kenny, 2011). Research findings have shown that in musicians who suffer from MPA, as many as 13% also experience moderate to serious levels of GAD, while 19% suffer from SAD, and 20% of these individuals also experience depression symptoms (Barbar et al., 2014; Kenny, 2011 Kenny & Holmes, 2015). In light of these prevalence rates, it may be important to consider MPA issues from a more holistic standpoint, where debilitating performance issues are viewed as an extension of a more globalized psychological disorder that extends into the realm of the individual's day-to-day existence.

Music Performance Anxiety

This section discusses the literature germane to the identification and symptomology; causes; triggers; onset; and treatment, coping, and preventions strategies of MPA. After having provided an analysis and synthesis of the foundational MPA literature, the literature review concludes by exploring how MPA issues impact undergraduate music schools and their students, how it is currently being addressed within undergraduate music schools, and



how undergraduate music students enrolled within these higher learning institutions are impacted by MPA-related issues.

Identification and Symptomology of MPA

Among the prevailing theories and conceptualizations of MPA, there is a consensus that MPA is a complex and multidimensional issue that complicates the lives of performing musicians and the student musicians who suffer from this disorder. MPA is used to describe the occurrence of a pronounced and ongoing fearfulness towards music performance in the presence of others that is facilitated by past anxiety conditioning experiences and manifests itself in a multidimensional manner that includes cognitive, emotional, somatic, and behavioral symptoms (Kenny, 2011; Osborne et al., 2014; Sarbesco & Dorgo, 2014). Within the Performance-Stress Model of Choking, MPA is conceptualized as generating from a combination of the performer's cognitions, autonomic arousal levels, emotions, and behavior responses; these domains are interdependent and interactive (Osborne et al., 2014). MPA can be viewed similar to arousal, and its intensity levels exist along a continuum that ranges from mild anxiety that can optimize a performance to more severe levels of anxiety that can fully derail a performance.

MPA at more modest intensity levels can help to prepare a musician for optimal performance by generating an ideal level of preperformance arousal (Spahn et al., 2015; Studer et al., 2011). Even world-class performers experience the all too familiar butterflies prior to major performances, and if these physiological symptoms are accepted as facilitative, low to moderate levels of MPA can facilitate performance excellence. There is a tipping point, however, and when a musician encounters excess levels of MPA, there is a pronounced disruption of musical performance and skilled execution is impaired as the



performer's attentional focus shifts away from the task of performing the selected music towards a self-evaluative state, and a globalized narrowing of attention towards negative internal dialogue (Buma et al., 2015). The perception of a threat activates the physiological response patterns that redirect the performer's resources towards protecting himself or herself from the real or imagined peril that exist within high-stakes music performance.

Identifying MPA is a complex task due to the diverse nature with which is manifests in musicians, and the clinician should consider whether MPA is an isolated issue in an otherwise psychologically healthy individual or if the performance issues are related to comorbid disorders. MPA should not be contemplated as an isolated issue, and in higher intensity cases, it should be conceptualized as stemming from SAD or GAD as survey research has shown that 95% of performers who suffer from severe performance anxiety meet the criteria to be diagnosed with SAD (Kenny, 2011). It is also widespread among musicians experiencing MPA to suffer from panic disorders, depression, and substance abuse issues (Kenny, 2011; Kenny & Holmes, 2015)

The symptoms associated with MPA are diverse, multidimensional, and interdependent. Among the cognitively based symptoms that commonly manifest in musicians suffering from MPA are a fear of and a preoccupation with committing performance errors, a negative self-evaluation, excessive worries that anything short of perfection will result in negative evaluations by others, and a tendency to catastrophize the ramifications of receiving negative appraisals (Osborne et al., 2014). The cognitive symptoms of MPA also serve to reduce the possibility that the performer will be able to achieve an ideal performance state and place the individual in a distracted state of mind that often compromises his or her actual level of musical expertise. When these cognitive



symptoms align with the physiological, emotional, and behavioral symptoms, even a world-class musician can lose the ability to perform to his or her full musical potential.

Emotions play a large role in determining how significant an impact MPA issues will have upon the performer's ability to execute under the pressure of high-stakes musical performance. Emotional responses to MPA include the fashion in which the performer perceives the performance event, and negative perceptions of the upcoming performance can cause the individual to become irritable, apprehensive, and fearful of failure (Topoglu, 2014). These negative emotions then serve to distract the performer and contribute to performance declines.

Among the list of well-known performers who have endured the debilitating effects of MPA are Barbra Streisand, Itzhak Pearlman, George Harrison, and Glenn Gould (Kenny, 2011). Glenn Gould was regarded as a virtuoso pianist renown for his musical excellence, and he experienced severe levels of MPA while touring as a performing artist, which forced him to retire from performing very early on in his career (Topoglu, 2014). MPA, then, is not just an issue that impacts the self-conscious beginner, and even within the ranks of elite-level performers, this disorder can pose a serious threat to a music performance career.

Because the performance of music is such a complex motor skill, the primary physiological symptoms associated with MPA can produce severe impairment to musical performance. The act of performing music is among the most intricate of the fine motor skill activities that people engage in due to the coordination of multiple muscle groups, limbs, brain processes, and range of emotions that are required to successfully communicate the written notes within the musical score to the members of the audience (Globerson & Nelken, 2013). Somatic symptoms of MPA include increased heart rate, shallow breathing, excessive



perspiration, increases in muscular tension, digestive issues, lightheadedness, and uncontrollable shaking of the limbs, which all can result in negatively influencing the dexterousness that is associated with skilled music performance (Broomhead & Skidmore, 2014; Osborne et al., 2014). The onset of MPA can also restrict the musician's circulation to the extremities and can result in cold or numb fingers, and this can have severe implications for the fine motor control that is associated with skilled music performances (Broomhead & Skidmore, 2014).

The behavioral element of MPA focuses upon the way in which the performer responds to the discomfort associated with MPA. Avoidance of music performance is perhaps the most obvious example of how a musician can alleviate the discomfort associated with MPA (Papageorgi et al., 2010). Many skilled undergraduate music students drop out of school, and music performance entirely as a result of their inability to effective manage their MPA issues (Kuan, 2012). Many of the behavioral signs of MPA center around the performer's desire to avoid the anxiety associated with high-stakes musical performance, and these behavioral symptoms can cause the individual to have a stiffly-held neck, ongoing wringing of the hands, and their facial expression becomes very serious and has an appearance of worry or dread (Topoglu, 2014). Another behavioral element that some musicians who suffer from MPA engage in are maladaptive coping behaviors, and these often take the form of substance-based strategies, which range from occasional to habitual use of alcohol, tobacco, and prescription or illegal drugs (Kenny, 2011).

Musicians who engage in substance-based coping behaviors to manage their MPA issues commonly resort to prescription medications that include tranquilizers; antidepressants; beta-blockers; and the use of alcohol, tobacco, or illicit drug use, and these



substance-based coping strategies are widespread among musicians (Kenny, 2011; Studer et al., 2011). In research conducted by Studer et al. (2011), 20% of undergraduate music performance students reported that they had engaged in substance-based coping behaviors, and nearly two-thirds of these individuals had utilized beta-blockers to help them cope with MPA. Among the commonly utilized forms of beta-blockers in use today are propranolol and nadolol. Research findings among elite level musical performers have estimated that between 20% to 30% of these individuals have acknowledged the use of beta-blockers as a strategy to diminish the physical aspects of MPA (Juncos & Markman, 2015; Kenny, 2011).

The downside to substance-based coping strategies is that regular use of pharmaceutical and illicit drugs, alcohol, and tobacco place these musicians who are attempting to escape the symptoms that are associated with MPA at an increased risk for experiencing the negative side effects that are associated with these substances. Dependency and addiction are two of the primary side effects of these substance-based coping strategies. Additionally, there are often other side effects that should be considered before engaging in the use of medications for the treatment of MPA. Beta-blockers were designed to prevent the binding of adrenaline and noradrenaline to the beta-adrenoceptors in heart patients by reducing the sympathetic arousal of the cardiac system, and in musicians suffering from MPA issues, it reduces the physiological responses that are normally experienced when a performer perceives a threat (Kenny, 2011; Nagel, 2010). Beta-blockers are somewhat limited, however, in that they only address the bodily symptoms of MPA and do not have any impact on the negative cognitions that are generally present in those suffering from MPA (Juncos & Markman, 2015; Kenny, 2011).



There is also the danger that musicians experiencing MPA issues will access and use beta-blockers without consulting a medical doctor. Survey research findings indicate that a high percentage of musicians who use beta-blockers do so without the guidance of a doctor, and this is concerning due to the importance of correct dosages and the potential for severe side effects (Nagel, 2010). Another drawback to the use of beta-blockers is that some performers experience a lowered sense of emotional commitment to the performance when using these medications during high-stakes musical performances (Juncos & Markman, 2015; Kenny, 2011). The use of beta-blockers should not be viewed as a cure-all for MPA and should ideally be just one component of a comprehensive intervention that includes a professional liaison with a mental health professional who can offer proper psychological guidance and therapy.

Causes and Triggers

The development of MPA is thought to begin during the childhood years and develops over time to reach its peak level of manifestation during an individual's college years (Kenny, 2011; Nagel, 2010; Patston, 2014). It occurs as a summation of an individual's prior musical experiences and encounters with teachers, parents, and peers. Most of the contemporary theories concerning the development of MPA suggest that it stems from a fusion of the performer's genetic predispositions and his or her past musical experiences (Hanin, 2010; Patston, 2014). Hanin suggested that in addition to the performer's state and trait experiences are the meta-experiences which are explained as past learning experiences in music performance contexts; these encounters serve to influence how the individual will appraise subsequent performances and how these should be managed.



Identifying the causes and triggers of MPA among musicians is, therefore, complex due to the idiosyncratic nature that is associated with its onset. The individual is the primary focus in investigating the causes of MPA as no two performers are impacted identically by the triggers that serve as precursors to the onset of anxiety and stress (Kenny, 2011; Kenny & Holmes, 2015; Osborne et al., 2014; Papageorgi et al., 2007). The majority of present-day theories of MPA are multidimensional and include cognitive, physiological, and behavioral components that are interactive and are most commonly initiated when the performer feels threatened by the performance circumstance (Kenny & Holmes, 2015; Kirchner, 2011; Papageorgi et al., 2007). There was consensus within the literature that the onset of MPA begins with the performer identifying a threat to him or herself. MPA arises due to something that has been triggered at the cognitive level, such as the identification of a real or imagined threat and the symptoms follow (Buma et al., 2015; Patston, 2014).

The conceptual model of MPA introduced by Papageorgi et al. (2007) is among the most comprehensive and detailed MPA theories because it includes elements for preperformance, during performance, and post-performance circumstances. Papageorgi et al. suggested that there are three primary contributors to the onset of MPA, which include the performer's vulnerability to experiencing anxiety, his or her task-specific skills, and the specifics of the performance context. These primary factors influence the way the performance context is evaluated or perceived, which impact the individual's before-event mindset, and each factor serves to impact arousal levels and the initiation of the autonomic system.

A consensus among the prevailing MPA researchers suggests that the individual's personality traits also play an important role in the onset of MPA (Kenny et al., 2012;



Osborne et al., 2014; Papageorgi et al., 2010; Sarbescu & Dorgo, 2014). Research findings have demonstrated that the personality characteristics of perfectionism, neuroticism, introversion, and trait anxiety are positively associated with the development and onset of MPA (Sarbescu & Dorgo, 2014).

Within the 5-factor model of personality traits, perfectionism is highly notable for its association with MPA issues. Perfectionism may place an individual at a higher risk for developing MPA because these individuals generally spend a great deal of energy in self-evaluation that is often accompanied by dichotomous definitions of performance outcomes, and associations of self-worth are directly linked with the individual's performance evaluation (Kenny, 2011; Osborne et al., 2014; Papageorgi et al., 2007). Perfectionists have a tendency to fall prey to all-or-nothing thinking, and even a small error in an otherwise great performance can cause the performer to believe that they performed poorly.

Identifying the causes and triggers of MPA is a complex process because its onset appears to be a highly individualistic process that is influenced by a wide range of preperformance variables. Research findings from Kenny et al. (2012) identified 22 various causes of MPA among elite level musicians, and the top six causes cited by professional orchestral musicians were when the performer's expectations promote feelings of internal pressure to perform, over or under-arousal, lack of preparedness, other health problems, being prone to high levels of trait anxiety, and negative internal dialogue. Osborne et al. (2014) suggested that the most frequent precursors to MPA are a lack of self-confidence, insufficient preparation or a lack of familiarity with the music, a perceived pressure from self or others to perform at a high level, and disproportionate levels of arousal.



The process of performance anxiety begins when the musician perceives a real or imagined threat of danger to him or herself, and then the flight or fight response is initiated within the limbic system. When the brain identifies a situation that resembles a painful or threatening experience in the performer's past, it activates the limbic system, which initiates the release of the neurochemicals adrenalin, noradrenalin, and cortisol into the system and this begins the anxiety response process (Broomhead & Skidmore, 2014; Kenny, 2011; Papageorgi et al., 2007). This process manifests in countless ways as each individual has his or her unique past experiences and memories that may trigger the physiological anxiety response, which instigates the multidimensional symptoms that are associated with MPA.

While one musician's MPA could simply be triggered by the anticipation of being the center of attention in a high-stakes performance, such as an audition or jury examination, another musician's MPA could be initiated by seeing a member of the audience who has been critical of his or her past performances. In the case of Barbra Streisand, after an embarrassing memory lapse where she forgot the lyrics during a high-profile, Central Park performance in 1967, she suffered from severe MPA issues that caused her to give up performing live for nearly 30 years (Kenny, 2011). Many musicians also experience pressure to execute flawless performances from within themselves or significant others, and this tension can be integral in the onset of the MPA experience.

The performance context can also play a large role in the onset of MPA. The musical genre and size of the performing group can play a role in how vulnerable the musician feels to the perceived threat of musical performance. Sarbescu and Dorgo (2014) found that musicians who perform in a solo context experience the most severe levels of MPA as compared to ensemble performers. There is nowhere for the solo vocalist or instrumentalist



to hide from public scrutiny or evaluation as might exist for a member of a large orchestra or a group performing popular music, and this may help to explain why instrumental or vocal soloists have been found to be highly vulnerable to MPA issues.

High-stakes musical performances like auditions or jury examinations are a specific example of how the context of the performance can also contribute to the onset of MPA. A performer may experience higher levels of anxiety and feel more vulnerable during such events where skill evaluation becomes the primary purpose for the performance (Kenny, 2011; Osborne et al., 2014; Papageorgi et al., 2007). This form of MPA is referred to as audition anxiety where the purpose of the performance is to showcase the performer's skills in relation to a job opportunity or as part of an academic requirement. Because undergraduate music performance students rely so heavily on their ability to perform in high-pressure scenarios like auditions and jury examinations, these types of performance contexts may play a large role in the onset of MPA issues.

The repertoire selected for performance can also play a role in MPA, and when the performer attempts musical selections that are at the limit or beyond of his or her capabilities, there may be a reduction in self-confidence, which increases the potential for MPA issues to occur. The music that is selected for high-stakes public performances should provide a healthy challenge but should not be beyond the performer's skill level (Kirchner, 2011). The level of preparation can also play a role in the onset of MPA. Without a sufficient amount of practice and psychological preparation, the performer will likely encounter thoughts of lowered task efficacy and allow his or her thoughts to focus on the fear of failure (Nagel, 2010; Papageorgi et al., 2007). Many skilled musicians seem to rely solely on practice to prepare for their performances. Neglecting the important role that psychological preparation



plays in effective music performances is a widespread issue among musicians and may explain why many talented musicians are unable to sustain successful performing careers.

Performers and musicians themselves should not take all the blame as few music educators and music schools in history have placed a high level of importance on the psychological component of music performance. This trend does appear to be changing as more research becomes available on how MPA negatively impacts musicians' lives and how schools can design and apply effective treatment protocols. There is growing support that has begun to place an emphasis on MPA education, alongside the standard music performance pedagogy, where understanding the notes, how to read them, music theory, and instrument-specific technique is only part of the equation (Broomhead & Skidmore, 2014; Nagel, 2010; Papageorgi et al., 2007). The current trends in addressing the psychological component of musical performance are examined next in order to provide an understanding of the methods that are at the forefront of contemporary MPA treatment strategies.

Treatment, Coping, and Prevention Strategies

In order to examine the intervention techniques that can be effective in treating and managing MPA, it is essential to first examine what comprises ideal and inferior musical performances. Optimal or peak performances occur when the performer feels confident, does not fixate on a fear of failure, and effectively manages his or her emotions and arousal levels in order to achieve a highly focused yet relaxed performance mindset (Broomhead & Skidmore, 2014; Osborne et al., 2014). Peak performances often result when the performer attains an ideal performance state that facilitates the flow experience and allows the individual to completely immerse him or herself in the task and attain a present-focus. Inferior performances ensue when the performer has lingering thoughts of self-doubt,



experiences excessively high or low arousal levels, loses focus, or fixates on the performance outcome rather than focusing on the performance task itself (Osborne et al., 2014).

Many athletes and performing musicians have recounted stories of poor performances that they attributed to focusing on the outcome rather than concentrating on the performance itself. This type of distraction can initiate a poor performance mindset by forcing the performer's attention away from the performance itself and onto the intended outcome. A performance mindset is made up of the cognitions that impact a performer's attitudes and behaviors while on-stage, and the ability to maintain an ideal mindset is an essential component of expressive and skilled performances (Broomhead & Skidmore, 2014). The best musical performances seem to occur when the performer has a task-orientation that is focused on communicating an expressive interpretation of the music to the audience and is willing to take chances based upon a high level of self-belief in his or her musical abilities. Creating an optimal performance mindset is a primary component within the wide range of intervention strategies that are currently in use and are discussed in the sections that follow.

The prevailing treatment, coping, and prevention strategies that are utilized for the treatment of MPA issues have borrowed heavily from the field of sport psychology, and this likely stems from the similarities that exist between musical and athletic performance. There are a number of relationships that exist between elite-level music and athletic performances, and managing the psychological pressure that exists in both disciplines is essential to optimal performance outcomes (Clark & Williamon, 2011; Steyn, Steyn, Maree, & Panebianco-Warrens, 2015). However, the lack of empirical research that has been conducted in the application of sports-based psychological skills training techniques to the discipline of music performance should be cause for concern among psychology



professionals working with music performance populations. Apart from the similarities that exist between the athletic and music performance domains, it may also be important to acknowledge that there are discreet differences between these performance disciplines.

Performance does differ between the fields of sports and music performance as the fine motor skills required in elite musical performance requires an increased level of calmness as compared to athletic performance (Studer et al., 2011).

A great many of the psychological skills education programs that are utilized with athletes focusing on integrating the performer's mental and bodily stress responses in order to promote a sense of focused relaxation that allows the performer to be fully task-oriented and in the moment (Osborne et al., 2014). Practitioners within sport psychology have utilized a wide range of psychological skills with athletic populations in order to alleviate their performance anxiety issues, and there is some evidence that these same strategies may be effective for addressing MPA issues among performing musicians. Research conducted by Steyn et al. (2015), incorporating mental skills and mindfulness training with undergraduate music performance students, found that the implementation of such sports psychology training techniques can be effectively applied within music performance contexts to reduce the negative effects of performance anxiety.

Among the widely accepted psychological skills training methods utilized by sport psychology practitioners with athletes who suffer from performance anxiety issues are relaxation strategies, positive imagery and visualization, positive self-talk, cognitive restructuring, goal setting, and preperformance routines. Research conducted by Clark and Williamon (2011) found that the inclusion of a comprehensive psychological skills training program with conservatory music students enhanced confidence levels, reduced



performance-related anxiety, and promoted healthier attitudes towards high-stakes musical performances.

The use of cognitive behavioral therapy (CBT) and some of its specific treatment strategies have been at the forefront of MPA intervention protocols. Cognitive restructuring may be one of the most important techniques that has been used to help musicians who are suffering from MPA issues. Cognitive restructuring is a type of CBT and is highly relevant in the treatment of MPA as it helps the performer to recognize and oppose the negative thoughts that are associated with onset, while facilitating a transition to a more objective, positive, and rational outlook on high-stakes musical performance (Nagel, 2010; Osborne et al., 2014).

Many of the psychological skills that are commonly used in sports and performance psychology, such as positive self-talk, imagery and visualization, progressive relaxation, deep breathing, and centering, have been developed by practitioners into preperformance routines to help the performer achieve his or her ideal performance mindset. Incorporating multiple skills into a before-performance ritual has become a widespread strategy in both sports and music performance domains. The use of a comprehensive preperformance routine that includes a wide range of mental skills is superior to the use of singular strategies, and this method has been found to reduce the likelihood of subpar performances by fully activating the performer's ideal performance state of mind (Montello, 2010; Osborne et al., 2014).

One comprehensive psychological skills program that has been found to be effective within the domain of music performance is an educational workshop known as the Performance Wellness Seminar (Montello, 2010). This program involves educating



undergraduate music students on how to engage in deep breathing, progressive relaxation, autogenic training, cognitive restructuring, guided imagery and visualization techniques, and mindfulness training to serve as effective MPA prevention and coping strategies (Montello, 2010,). Research findings have shown that the Performance Wellness Seminar is a successful program for assisting undergraduate music students in overcoming MPA-related issues and has been found to enhance students' self-efficacy levels for high-stakes music performances.

In exploring the strategies that have been adapted from the sport psychology domain and redesigned to be applicable to the music performance domain, the use of cutting-edge technology, such as virtual-reality simulation techniques, is important to consider. Virtual reality environments are a form of exposure training that help to diminish the anxiety and arousal levels of performers through the use of immersion where the individual is placed within the specific environmental context that elicits his or her distress (Bissonnette, Dube, Provencher, & Sala, 2015; Williamon, Aufegger, & Eiholzer, 2014). The reason for this type of treatment method may be that unlike athletes who are regularly performing in front of spectators during practices and competitions, musicians, on average, spend most of their practice time alone in isolation. One of the issues that undoubtedly impacts music students' lack of abilities to effectively cope with MPA is that most of their rehearsal time is spent in the solitude of practicing alone, and performing for others occurs rarely and becomes the exception rather than the rule (Williamon et al., 2014).

The use of virtual environments may offer music students a great opportunity to employ the use of psychological skills strategies within the performance context and develop the capacity to perform to their true potential in high-stakes performances. The use of a



virtual performance environment can be an effective method for addressing MPA by allowing students to deal with their performance anxiety while developing their performance abilities in a variety of controlled performance scenarios (Williamon et al., 2014). The use of virtual performance environments could help to provide musicians with a stress-free way to become comfortable within the context of public performances, and this type of preparation may help to instill self-confidence within the performance setting due to the individual's newfound familiarity with the performance environment as a result of immersion-based simulation-training. In a comparison study, the use of virtual-reality, exposure training with an experimental group significantly lowered the post-intervention levels of MPA among undergraduate piano and classical guitar students within the performance environment (Bissonnette et al., 2015).

There are also a number of newer treatment strategies that have been developed from the discipline of CBT and suggested as therapeutic strategies for MPA. CBT is a widespread intervention strategy for musicians who suffer from MPA because of its efficacy for helping to alter performers' thoughts, emotions, and behaviors (Nagel, 2010). One of the promising new therapies that have been developed within CBT is known as acceptance and commitment therapy (ACT).

The primary principle of ACT is that instead of attempting to alter the performer's cognitions as many of the commonly utilized psychological skills interventions do within the domains of sport and performance psychology, ACT instead is designed to help enhance psychological flexibility through the promotion of mindfulness and acceptance (Juncos & Markman, 2015). Although many of the principles of ACT appear counterintuitive to psychological skills training techniques, such as deep breathing, progressive muscle



relaxation, and guided imagery, since the performer is encouraged to accept his or her MPA issues rather than confront them, the initial research findings have shown promise for its therapeutic value in the treatment of MPA. The use of ACT may prove to be a highly effective treatment method for MPA as initial research findings have shown that it is effective in improving music performance quality by helping musicians to accept the symptoms of MPA while focusing on valued behaviors (Juncos & Markman, 2015). ACT may be an ideal strategy to help alter the way that a performer interprets his or her MPA symptoms, and this may allow the performer to view mild to moderate levels of MPA as facilitative in creating an ideal performance mindset.

Another form of psychological intervention for MPA is known as psychodynamic therapy, and this strategy may be especially useful in more severe cases where the performer may have comorbid issues that underlie their MPA issues. Within the psychodynamic conceptualization of MPA, the multidimensional manifestations of MPA are thought to be based upon the individual's past unsettled encounters and separation issues with significant others, and these are believed to underlie severe MPA issues (Kenny & Holmes, 2015; Nagel, 2010). Nagel further suggested that an individual's past experiences and emotions can be repressed, yet still have a powerful impact on their current emotions and behaviors even though they are not available to consciousness without the assistance of psychotherapy. Kenny and Holmes suggested that many performers with separation issues experience the most severe subtype of MPA, which often includes a comorbid panic or depressive disorder. Although there is little published on the use of psychodynamic therapy for MPA, this treatment approach appears to have merit because it is the only treatment method that



considers the importance of addressing the underlying issues rather than simply treating the symptoms of MPA.

The reconfiguration of psychological skills training techniques from the fields of sport and performance psychology into music-specific applications is in its infancy. The priority of the immediate future will be for more research to be conducted on the application of psychological skills techniques for musicians experiencing MPA issues, and the findings from this empirical research can then become the catalyst for the ongoing development and design of future MPA intervention strategies. Foremost among this research on the application of psychological skills training methodologies with populations who suffer from MPA should be to investigate specific intervention strategies for specific subtypes of MPA and those individuals who suffer comorbid anxiety, depression, or panic disorders. Kenny (2011) suggested that MPA differs not only in its intensity, but there are vast differences between the subtypes of MPA, and it is likely that effective treatments will need to be specifically targeted.

There are a number of shortcomings that currently exist with the available MPA treatment methods and the research that has been conducted on the efficacy of these contemporary strategies. The prevailing treatment protocols for MPA are one-dimensional and appear to be based on nomothetic research rather than specifically targeted for the individuals suffering from various levels and subtypes of MPA. Kenny (2011) suggested that more idiographic research needs to be conducted and these studies need to be longitudinal in nature so that more long-range intervention outcomes can be determined.

Another caveat concerning MPA is that it may not be receiving the clinical attention that it deserves as it does not appear within the DSM-5 as a recognizable disorder (Kenny,



2011). MPA issues are often viewed by those who suffer from them and the psychological health professionals who treat them as naturally occurring phenomenon rather than as authentic and treatable disorders (Barbar et al., 2014). There is consensus among the prevailing MPA researchers that MPA is a part of undergraduate music school culture and that students are often expected to deal with it on their own (Osborne et al., 2014; Papageorgi et al., 2010; Patston, 2014).

Another weakness of the current MPA treatment methods that are in widespread use is that they primarily target its symptoms rather than its underlying causes. In these treatments, MPA is often perceived as the issue instead of a manifestation of symptoms that arise from other clinical disorders that initiate its onset (Kenny, 2011; Nagel, 2010). This one-dimensional treatment approach fails to approach MPA from a holistic standpoint where the entire person becomes the focus of the intervention strategy rather than just the anxious performer who feels threatened by the performance environment.

Limited research has been conducted on the efficacy of the sport and performance psychology methods for the treatment of MPA; yet, the findings do suggest that mental skills training techniques are effective in reducing performance anxiety (Montello, 2010; Osborne et al., 2014). What is needed is more empirical research to help design more individualized treatments that are based upon the individual rather than the current one-size-fits-all approaches that are currently in use. More research is also needed in regards to accurate assessment and diagnosis that will allow practitioners to accurately identify MPA intensity levels and subtype. It has been proposed that MPA can be categorized according to three distinct subtypes: as a focal anxiety disorder that is specific to music performance and does not overlap into other life contexts; as a comorbid expression of SAD or GAD; or, in its most



severe form, as a disorder with symptomology similar to clinical depression or severe panic disorder (Kenny, 2011; Kenny & Holmes, 2015; Nicholson et al., 2015). The lack of variation that exists within the available MPA treatment literature underlines the point that the development of effective treatment protocols is in its infancy and a great deal of further research is needed.

How MPA Impacts Undergraduate Music Schools and Students

A major concern about MPA is that there is very little available literature that is focused on how undergraduate music schools address this issue within their music performance curriculums. Further, no research articles have been located that pertain to how licensed mental health practitioners working within university mental health clinics provide individualized or group treatment interventions for students suffering from MPA issues. The bulk of the research articles that do address MPA within undergraduate music schools point out the irony that exists between the pressure associated with high-stakes music performances and the lack of attention that is paid to the psychological component of performance within the curricula of undergraduate music schools.

There is agreement among prominent MPA researchers that undergraduate music schools have largely failed to implement specialized coursework that is designed to educate students about MPA and equip these scholars to successfully cope with the pressures that are inherent in high-stakes music performances (Hildebrandt et al., 2012; Kuan, 2012; Patston, 2014). Given that undergraduate music performance students' academic progress is highly dependent upon the outcomes of recitals and jury examinations that are loaded with pressure and anxiety, it is surprising that the psychology of performance does not command a more prominent place within undergraduate music curricula. If the objective of collegiate music



performance programs is to provide students with the resources that are essential to optimal performance skills, the implementation of coursework that is dedicated to educating students on coping with MPA is essential (Kuan, 2012; McGrath, 2012; Patston, 2014: Steyn et al., 2015).

A preponderance of the available research pointed out that given the high prevalence rates of MPA among undergraduate music performance students, the curricula of undergraduate music schools should be redeveloped to fully address this disparity. Based upon prevalence rates that indicated more than 20% of undergraduate music students experience noteworthy levels of MPA and the negative implications this can have for their academic progress and professional opportunities post-graduation, music performance curricula should be updated to include sufficient MPA training and coping strategies for students (Papageorgi et al., 2010; Steyn et al., 2015).

There also may be more undergraduate music performance students suffering from MPA issues beyond the 20% prevalence rates that are reported. Research findings have demonstrated that among undergraduate music performance majors, a majority of subjects felt that their MPA issues negatively influenced their music performance capabilities and academic progress (Schneider & Cheskey, 2011; Zakaria, Musib, & Shariff, 2013). Zakaria et al. (2013) found that 88% of undergraduate music students reported that performance anxiety issues negatively impacted their ability to perform during public performances, recitals, and examination juries.

The nature of high-stakes music performance for undergraduate music students compounds the importance of addressing MPA within the context of undergraduate music schools. Undergraduate music students are constantly called upon to perform in pressurized



situations, such as auditions, recitals, playing for examination juries, and public performances, as the student's performance outcomes play a key role in determining his or her academic progress (Zakaria et al., 2013). Nearly 25% of undergraduate music students participating in a survey study reported that MPA issues had been the primary reason for failing an examination jury, and nearly a third of these students reported that MPA had caused them to perform poorly at important audition opportunities (Studer et al., 2011). Because of these unique demands placed upon undergraduate music performance students, special attention should be given to helping these scholars develop the ability to cope with the unique pressures of high-stakes performances.

Music performance undergraduates have been provided with little to no guidance or education on how to effectively manage their emotions and the anxiety that exists in the environment of high-stakes music performance (Montello, 2010). Survey research findings reinforce the need to re-examine collegiate music performance curricula as half of the music performance students reported that they lacked an appropriate understanding of how to effectively cope with their MPA issues (Studer et al., 2011). Many undergraduate music performance students are unaccustomed to the psychological and physiological responses that they encounter with MPA issues, and most do not know how to manage their fear, emotions, and bodily responses to their performance anxieties (Montello, 2010). Approximately two-thirds of undergraduate music students reported that they were open to receiving assistance for their MPA issues and would be receptive to taking classes that are focused on MPA prevention and coping methods (Studer et al., 2011).

Within the literature, there is also a lack of consensus as to when undergraduate music students are most prone to experience MPA. Some of the research suggested that



during the first year of undergraduate music studies, students are especially vulnerable to stress and anxiety, and enhancing these students' coping abilities should be an academic priority (Hildebrant et al., 2012). There is also evidence that MPA issues do not simply diminish over time based upon undergraduate music students' cumulative performance experiences. Research conducted by Studer et al. (2011) found that MPA issues became more prevalent during students' second and third years of higher music education. MPA issues do not subside based purely on an individual's performance experiences and more performance experience does not necessarily diminish its impact upon future high-stakes performances (Patston, 2014).

Undergraduate music schools that continue to overlook the importance of psychological skills education within music performance curricula may be jeopardizing the academic progress of students who suffer from MPA issues. It is possible that administrators who oversee undergraduate music schools' curricula consider that MPA issues are better addressed individually rather than in the classroom. The danger in this strategy lies in the potential that many students who are facing MPA issues will not seek out the assistance they need. Even though the numbers of undergraduates who seek assistance for depression and anxiety issues have risen in recent years, the majority of students do not ask for help when they need it (Wristen, 2013). The other side of this equation is that those students who do ask for help are frequently receiving this assistance from unqualified sources.

One of the alarming realities is that undergraduate music students who do ask for help with their MPA issues are often asking their primary instrumental instructors rather than qualified psychological practitioners (Osborne et al., 2014). Although these music educators may have some personal experience in MPA issues, it is likely that students would be better



served by a qualified mental health care professional or performance psychology specialist.

Rarely do music performance faculty members have the necessary skills and training that are required in the application of MPA-specific psychological skills strategies (Montello, 2010; Patston, 2014).

It is hard to imagine that higher-learning institutions would believe that it is an ideal practice to allow students' primary instrumental instructors to fulfill the role of primary service providers for students who are experiencing MPA issues within undergraduate music schools. Research findings have found that approximately 30% of individuals whose performance careers are cut short by unmanageable MPA issues transition into roles as music educators at the university level (Patston, 2014). By employing these faculty members who are unable to cope with their own personal MPA issues, undergraduate music schools may be perpetuating the proliferation of MPA among students without the implementation of preventative educational training programs that are delivered by qualified professionals and are focused on the psychological aspects of musical performance (Patson, 2014). The objective of the research study presented here was to add to the relevant literature through the examination of what is currently occurring within undergraduate music schools and, where applicable, university mental health clinics to address students' MPA issues.

Summary

The review and synthesis of the relevant MPA literature suggests the need for more specific MPA research that is focused on how this issue is addressed within undergraduate music schools. Within the literature review presented here, the prevailing theories and conceptual frameworks that have shaped the contemporary understanding of effective treatments for MPA have been presented. This chapter has also outlined the contemporary



treatment strategies that are currently in use within the fields of sport and performance psychology, as well as the incongruences that exist in simply applying sport psychology-based mental training regimens within the domain of musical performance.

The current dilemma that exists within undergraduate music schools has also been examined in order to highlight the importance of this research study. The lack of congruency that exists between the high prevalence rates of MPA in the population of undergraduate music performance students and the lack of inclusion of formalized coursework that is focused on training and educational strategies that could assist these students in addressing MPA issues is distressing. This fueled the need for conducting qualitative research, and within Chapter III, a detailed discussion is presented that fully explains how the research study was carried out by providing a step-by-step process that was followed throughout the research process.



CHAPTER III: METHOD

The purpose of this descriptive multiple case study was to explore the perspectives of undergraduate music school curricula administrators, faculty members who serve as primary instrumental instructors and provide psychological guidance to students, and, where applicable, licensed mental health care professionals who are working within university mental health clinics in regards to how MPA issues are addressed within the schools in which they are employed. The data gathered from the participant interviews was further substantiated by including the data from 14 academic catalogs and two course syllabi. This chapter provides a detailed plan of execution that was designed to allow a full exploration of how MPA is being addressed, if at all, within undergraduate music schools. These detailed steps allow future researchers to replicate the study.

This chapter begins by providing justification for the chosen methodology and research design by citing the current literature that is available concerning qualitative research design. A short description of other methodologies that may be less effective than the chosen strategy will then be presented. The remaining sections of this chapter will present the primary research questions along with their related sub-questions, the selection and the recruitment process that was utilized in accessing participants, the types of data that were collected, the role of the researcher in the data collection process, the topic of bias will be addressed, and the strategies that were used to minimize its impact on the research, the relevant details in regards to participants and location of the study, the data collection process and the procedures that were followed in this pursuit, a discussion on trustworthiness and ethics, and finally a full description of how the data was analyzed and utilized for the purpose of addressing the research objectives and questions.



Methodology Selected

As of August 2016, no other research had been published, at least from the sources this research reviewed using relevant search terms, that examined how undergraduate music schools address MPA. Therefore, the need for this study was justified. The following qualitative design was used to help understand the various strategies that are used to address MPA issues within undergraduate music schools and the perspectives of participants provided background, rationale, and other insights that quantitative data would not have been able to convey.

Qualitative methodology provides researchers the opportunity to use inductive processes in order to gain a deeper understanding of the identified research issue (Baskarada, 2014; Merriam, 2014). Qualitative research methods are focused upon experiences and occurrences in the context where they naturally take place, and their focus is on encapsulating and examining these events or programs (Yazan, 2015). It is unlikely that a quantitative study that utilizes self-report measures or questionnaires would have the ability to provide sufficient answers to the questions and research objectives of the research study presented here. The use of qualitative research strategies within the area of psychology is becoming more acceptable due to its ability to offer rich and extensive descriptions of the experience under investigation (Kenny & Holmes, 2015; Merriam, 2014).

The specific design of this research study utilized a descriptive, multiple case study approach where the researcher assumed a primary role in the data collection process. Here, the researcher served as the sole interviewer and conducted semi-structured, one-on-one interviews with each of the participants in the study. The interview transcripts were triangulated with 14 academic catalogs, one from each undergraduate music school that was



represented in the study, and two MPA-specific course syllabi. The academic catalogs, course syllabi, and other relevant documents were examined prior to each participant interview to ensure that the interviewer had the appropriate background data concerning the MPA programs or policies that were in place at the undergraduate music schools where each participant was employed. This allowed the researcher to formulate university-specific questions and allowed the participants to provide more contextual data.

Because very little research has been conducted within the topic area of how MPA is addressed in undergraduate music schools to date, the multiple case study design was chosen as it provided an effective methodology for examining how a cross-section of undergraduate music schools in the United States address this issue. A multiple case study has been noted as an appropriate strategy for examining two or more cases for the sake of comparison and can be an effective way to investigate an issue where little knowledge exists for the purpose of developing a theory or conceptual framework (Merriam, 2014; Yazan, 2015). Other qualitative designs like an ethnography, a grounded theory study, or a phenomenological study would not have been appropriate for the purpose of investigating the perspectives of curricula administrators, faculty who are primary instrumental instructors who provide psychological guidance to students, and, where applicable, licensed mental health professionals working within university mental health clinics on the topic of how undergraduate music schools address MPA. Yin (2012) suggested that case study methods are ideally suited for evaluating an educational curriculum and can be effective for examining and illustrating the situation, operations, and its progress.

The descriptive, multiple case study format allowed the researcher to address each of the central research questions and the associated sub questions. The research design also



facilitated the collection of rich and descriptive data that was elemental in the development of a conceptual model that was created to help explain how MPA is addressed within a diverse range of undergraduate music schools within the United States. The conceptual model that resulted from the process of data analysis and interpretation provides an easy to read visual interpretation of the data (see Chapter V, Figure 9). It is hoped that the conceptual model provides a foundational understanding of how MPA is addressed within a diverse range of undergraduate music schools, and serves as a catalyst to spark future research within the topic area.

Research Questions

The purpose of the research study was to examine how undergraduate music performance curricula, faculty who serve as primary instrumental instructors and provide psychological guidance to students, and, where applicable, licensed mental health care professionals working within university mental health clinics address the issue of MPA among student populations.

- Central Research Question 1: What, if any, programs and policies do undergraduate music schools have in place to ensure that students are provided with sufficient MPA coping and prevention strategies? This central research question provides essential data concerning the required coursework, elective coursework, workshops, and other training programs that are currently utilized within undergraduate music schools to address MPA.
 - Sub-Question A: What other resources are available within undergraduate
 music schools to help students who are experiencing MPA issues?
 Sub-question A provides data on any other resources that are available within



- undergraduate music schools that do not fit into the aforementioned categories that were included in central research question 1.
- Sub-Question B: In lieu of formalized coursework, how do undergraduate music schools ensure that music performance students are provided with sufficient training that enables them to cope with MPA? This sub-question provides contextual data that imparts the research study with the insights of curricula administrators, faculty members who serve as primary instrumental instructors, and, where applicable, licensed mental health care practitioners on other strategies that undergraduate music schools utilize to address MPA issues outside the formalized classroom setting.
- Central Research Question 2: What are the perspectives of curricula administrators, faculty who serve as primary instrumental instructors and provide psychological guidance to students, and, where applicable, licensed mental health care professionals working within university health clinics in regards to how MPA is addressed within undergraduate music schools? The rationale for central research question 2 is to provide background data that offers a deeper understanding of how effectively undergraduate music schools are addressing MPA issues from the perspectives of these individuals.
 - Sub-Question A: Is there agreement among the responses of participants in regards to the most effective strategies that are utilized in undergraduate music schools to address MPA issues? Sub-question A is designed to examine the types of treatment and MPA coping and prevention strategies that are viewed as the prevailing methods within undergraduate music schools.



Study Participants

The participants for the research study were curriculum administrators who oversee the development of music performance degree programs, faculty who serve as primary instrumental instructors and provide psychological guidance to students, and, where applicable, licensed mental health care professionals who provide therapeutic services to students with MPA issues via university mental health clinics. Within the literature germane to multiple case study design, there is no formal consensus that formally establishes an optimal number of cases that should be included in a multiple case research study. The available research suggested that the number of cases to include within a multiple case study design should be determined when the data reaches a point of saturation. Data saturation is reached when including additional cases or participants produces redundant findings, and the ideal sample size will vary according to the objective of the research (Loh, 2013; Mason, 2010).

The multiple case study included a total of 19 participants representing 14 undergraduate music schools in nine states within the United States, 14 academic catalogs, and two course syllabi. The data collection and data analysis processes occurred in tandem, and the researcher adjusted the number of cases to coincide with a point of data saturation. The data collected from curricula administrators reached a point of saturation after 8 participants were interviewed. The data collected from primary instrumental instructors was more diverse, and a total of 10 participants were interviewed before a point of data saturation was reached. In regards to licensed mental health care workers working within university mental health care clinics, only one individual agreed to participate in the research. Although data saturation did not occur in this category, the data collected from this participant did



concur with the data collected from primary instrumental instructors. It is worth noting here that in personal communications with more than 20 clinical directors of university mental health clinics that these individuals reported that no students had presented with MPA issues in recent history. This represented an alarming trend during the recruitment and data collection process, and suggests that students with MPA issues are not seeking out qualified assistance for their MPA issues.

The sampling approach that was utilized within the research process was convenience sampling. In order to ensure the competency and expertise levels of participants some basic criteria for participation were mandated. The primary criteria that was required for participation as a curriculum administrator or faculty member who serves as a primary instrumental instructor and provides guidance to students was expertise, and only those who had a minimum of one year of professional experience in an appropriate role within an accredited undergraduate music school in the United States were eligible to participate. The criteria that was used to determine participation on the part of licensed mental health care professionals who treat students with MPA issues at university mental health clinics was that they have state licensure and also have a minimum of one year of experience working within university mental health clinics.

For this research study, the objective was to recruit participants from a wide variety of undergraduate music schools ranging from large state universities to small private institutions. A maximum of one curriculum administrator, one faculty member who serves as a primary instrumental instructor, or where applicable, one licensed mental health care professional from each undergraduate music school were eligible for participation in order to ensure that the information obtained in the data collection process would come from a



diverse range of participants representing a variety of undergraduate music schools. The researcher should ensure that those who participate in a research study represent the diversity inherent within a given population if the purpose is to make inferences or develop a theory from the study's findings (Baxter & Jack, 2008). The justification for the selection of specific cases within a multiple case study should include addressing how each case will provide insights into the phenomenon under investigation and the disparity of including several cases that are fully diverse in nature is ideal (Farquhar, 2012).

It is unlikely that the findings would be fully transferable to the overall population of undergraduate music schools; however, the intent of the research study was to create an understanding of the phenomenon where the findings would be illustrative of how undergraduate music schools in the United States address MPA. Participants within the research study represented a diverse range of public and private undergraduate music schools within nine states in the United States. The findings were used in the formulation of a conceptual model that explains how undergraduate music schools in the United States address MPA, which will be presented within Chapter V.

The recruitment process began by conducting an internet search of public and private undergraduate music schools within the United States. A list of these institutions and the relevant contact information of the appropriate senior administrators from each school was then compiled into a list. The recruitment of undergraduate music schools was based upon convenience sampling, and the list of potential schools to be contacted for institutional consent was sorted by the researcher to ensure that the list includes a continuum of undergraduate music schools that range from large, public universities to small, private schools. The researcher made every effort to ensure that a mix of prestigious and lesser



known schools were provided an opportunity to consent to participate in the proposed research study.

The recruitment process entailed sending letters of introduction via email that outlined the research study to senior administrators within each of the identified undergraduate music schools that were selected for participation (see Appendix D). The introduction letters asked for permission to contact and access to the contact information of curriculum administrators, primary instrumental faculty who provide psychological guidance to students, and licensed mental health care professionals working in university mental health clinics who have been employed in their current positions for no less than one year. This introductory letter for institutional permission document needed approval from the appropriate school officials and was signed prior to the recruitment of participants. Once institutional permission was granted, the researcher then sent email letters to potential participants who met the specified inclusion criteria within each undergraduate music school. Those individuals who responded and agreed to participate in the research study were provided with a cover letter (see Appendix E) explaining informed consent, and an informed consent document (see Appendix F), which included each of the required elements that have been stipulated within the University of the Rockies Institutional Review Board Handbook (IRB, 2014).

The initial recruitment strategy was not very successful with only one undergraduate music school granting institutional permission to interview its relevant employees. It is worth noting that more than 50 undergraduate music schools were contacted using this strategy, and few responded to ongoing email and phone messages over a six-week period. Upon reflection, it appeared that many undergraduate music schools did not want to



participate in the research. This was puzzling due to the researcher's ongoing communications with nationally recognized music educators who were enthusiastic to participate in MPA-related research at the collegiate level.

An alternate recruitment strategy was then employed due to the limited success with obtaining institutional permission from the relevant administrators within undergraduate music schools. This new strategy entailed contacting the membership of the College Music Society (CMS), which is a non-profit organization whose membership includes collegiate music school administrators and educators. A recruitment email was created and sent by CMS to its membership in nine states (see Appendix B). This strategy allowed the researcher to contact a large number of qualified participants from undergraduate music schools throughout the United States in a more efficient manner. While the undergraduate music schools' administrators seemed reticent to consent to institutional permission, the individuals who responded to the CMS recruitment email were eager to participate in the research.

The researcher spent a few minutes speaking with each participant while scheduling each participant's interview and again at the beginning of each phone or Skype interview to establish trust and rapport with each participant prior to commencing with the semi-structured interview questions (see Appendix C for interview protocol). This short, icebreaker period allowed the researcher to put the interviewee at ease, and then reassure each participant about how their confidentiality would be maintained throughout the research process. This served to make participants comfortable with the interviewer and the ethical standards of the research, and it increased the likelihood that responses were truthful, accurate, and that interviewees did not fear a breach of their confidentiality.



Data Collection

The primary data collection strategies that were used within the research study were accessing the relevant documents from each university's website that was represented in the study and conducting semi-structured interviews with each participant. Data from multiple information resources that is congruent on a given phenomenon can enhance the credibility of a research study's findings (Farquhar, 2012). The documents that were utilized were 14 academic catalogs and two course syllabi. These documents served as an outline of the mandatory and elective classes, textbooks, programs, and policies that are required for each music performance student enrolled within the undergraduate music schools that were represented in the research study. These documents were accessed from each participating undergraduate music school's website prior to conducting the semi-structured interviews with participants.

Including these public-domain documents as a data source served as a method for triangulating the data that was obtained during the semi-structured interviews with participants. Triangulating multiple data sources, known as between-methods triangulation, is a widespread strategy that is frequently utilized in case study research (Farquhar, 2012). The interviews for the research study were one-on-one, semi-structured interviews conducted by the researcher with each study participant either by telephone or via Skype based upon availability and convenience for the participant. The researcher made every effort to protect the confidentiality of participants by ensuring that the interviews were conducted in a safe and private setting.

The instrumentation for the interviewing protocol required the design and development of a number of open-ended interview questions that were properly aligned with



the research study's central research questions and sub-questions. The general interview guide strategy was utilized as it provides an ideal balance of structure and flexibility and provides participants with the opportunity to personalize their responses while ensuring that the essential topic areas are discussed and addressed within each interview (Turner, 2010). On average, the duration of each interview was 25 minutes which allowed sufficient time for detailed and in-depth participant responses.

In order to fully capture the data from each interview and provide an ideal method for creating a well-organized data base of knowledge for data interpretation, digital audio recording was utilized. Each interview was recorded using a Tascam DR-05 linear PCM audio recorder, which allowed the complete word-for-word audio recording of each interview to be fully transcribed in Word documents. The interview transcripts were then loaded into a computer database for coding, analysis, and interpretation. The research study utilized a computer aided qualitative data analysis software (CAQDAS) known as NVivo because of its ability to allow the coding of data to be performed directly from Word documents and to simplify the indexing, coding, and categorization of large amounts of research data. This served to organize the large amount of data that was collected and simplified the data analysis and interpretation process.

Procedures Followed

In order to provide future researchers with the ability to easily replicate the research study, a detailed, step-by-step explanation of the primary research procedures that were followed in conducting the research is presented in Table 2.



Table 2

Procedures that were Followed in Conducing the Research.

Sequence of Steps	Purpose/Summary
Developed an interview protocol.	A semi-structured interview protocol was designed with questions that aligned with the research objectives and research questions (see Appendix C).
Developed and utilized the appropriate confidentiality documents.	These documents provided for conducting ethically sound research and protected the confidentiality of participants (see Appendixes D, E, and F).
Obtained approval from the dissertation committee, RRB, and IRB prior to conducting a pilot study, which preceded data collection.	Once the research was approved, the pilot study allowed the interview protocol to be tested and no revisions were necessary. This helped to ensure that the questions were effective in generating the appropriate data.
Participant recruitment and data collection.	Contacted and obtained permission from undergraduate music schools, and actively recruited participants utilizing the appropriate consent documents (see Appendices D-F). Created a recruitment email that the College Music Society (CMS) sent to its membership within nine states (see Appendix B). Downloaded the appropriate academic catalogs and course syllabi from each undergraduate music school that was represented in the study, conducted semi-structured interviews with participants, digitally recorded each interview and created word-forword transcripts for inclusion into a computer database, created a journal entry at the conclusion of each interview, and included these field notes into a computer database. Member checking was conducted by encouraging each participant to review their personal interview transcripts for accuracy.
Data analysis and synthesis.	Utilized NVivo software to index, code, and categorize the data in order to identify the emergent themes. Utilized the research findings to synthesize the data for the purpose of creating a conceptual framework for how undergraduate music schools address MPA.



Pilot Study

In order to ensure that the semi-structured interview protocol was properly aligned with the research study's objectives, a small pilot study was conducted prior to initiating the data collection process. This entailed conducting interviews with two curriculum administrators and two primary instrumental instructors who provide psychological guidance to students who experience MPA issues in order to evaluate the effectiveness of the interview protocol. The procedures for this required the researcher to send an introductory letter for institutional permission to a senior level administrator of an undergraduate music school. After the senior level administrator granted permission to interview the designated employees within the undergraduate music school, and signed and returned the consent document, they were forwarded to the University of the Rockies IRB Chairperson.

Participants for the pilot study were also solicited through a recruitment email sent out by the College Music Society to its membership (see Appendix B).

The researcher then contacted potential participants via email and provided them with an informed consent cover letter and an informed consent document (see Appendixes E and F). The informed consent document was dated and signed by each participant and returned to the researcher electronically in order to satisfy the eligibility requirements for participating in the pilot study. The interviews for the pilot study followed the protocol outlined in the semi-structured interview protocol (see Appendix C). Additionally, at the conclusion of each pilot study interview, each participant was asked for his or her input on the ease with which the questions were understandable and applicable to the objectives of the research. The data and feedback generated within the pilot study helped to determine the effectiveness of the semi-structured interview protocol and it was reasoned that no revisions were necessary.



Trustworthiness

In order to increase the research study's trustworthiness, there are a number of strategies that were utilized to increase the likelihood that the study's findings would make a valid and reliable contribution to the field. One of the ways in which this research study attempted to increase the trustworthiness of its findings was to triangulate the data between 14 academic catalogs, two course syllabi, the researcher's field journal notes, and interviews with each participant. The researcher compared the relevant documents with the perceptions of curriculum administrators, primary instrumental instructors, and, where appropriate, licensed mental health care professionals working within university mental health clinics on the issue of how MPA is addressed within undergraduate music schools.

Following up with each participant on the information obtained in each interview and the researcher's interpretation of this data is known as member checking and is another important component of increasing the trustworthiness of the research study's findings. Member checking is a strategy that can increase the trustworthiness of a study by presenting the participants with a summarization of their data and offering them a chance to impart additional context or alternative interpretations of the data (Loh, 2013). Supplying each participant with a copy of his or her interview transcripts via email and requesting them to examine their responses for accuracy was the primary strategy used to address member checking. The researcher also provided an optional, follow-up session via Skype or telephone for each participant who believed that their interview transcripts did not properly reflect his or her intended responses during the semi-structured interviews. Three participants sent minor contextual revisions to their interview transcripts; however, no follow-up interviews were necessary.



Another important consideration for the research study was to diminish the potential for excess researcher bias to corrupt the way that the data was collected or analyzed. Including the insights of peers and members of the dissertation committee on the data collection process and the interpretation of the data was an essential resource for reducing potential bias to distort the proposed study's findings. Member checking should also include the views of colleagues and supervisors, which can be an effective strategy for reducing researcher bias during the process of data interpretation (Loh, 2013). The researcher consulted with the dissertation chair via monthly Skype sessions in order to address this issue during the process of data collection and analysis.

Based upon the researcher's experiences as a performer and music educator and having first-hand knowledge of how MPA issues can impact a musician, gaining the insights of other scholars, supervisors, and committee members also helped to reduce the amount of bias that influenced the analysis of the data. A vital component of research trustworthiness is to recognize and consider researcher bias and how contextual experiences can influence the development of emergent themes within the data analysis process (Rademaker, Grace, & Curda, 2012). Including the perceptions and opinions of these significant others served as a checkpoint towards enhancing the trustworthiness of the research study's findings.

The nature of the research study and the small number of participants would likely mean that the findings are not transferrable or confirmable. Instead, the findings provide future researchers with a conceptual framework of how MPA issues are addressed within undergraduate music schools within a nine-state region of the United States and provide a foundation upon which future research can be developed. Based upon the design of the research study, however, the findings will have a sufficient level of credibility and internal



validity. A research study's internal validity defines the range of its design and its subsequent findings, and this enables the research team to accurately interpret the information obtained during data collection (Yazan, 2015). The use of semi-structured interviews with participants from a diverse range of undergraduate music schools allows consumers of the findings to make their own inferences from the richly detailed data (Yazan, 2015).

Ethical Concerns

One of the most important considerations of the research study was to protect the participants' confidentiality and to ensure that no harm occurred to these individuals either personally or professionally as a result of their participation. This was of paramount importance due to the nature of the research design which required participants to share professional information that could be sensitive in nature and protecting the identity of participants and the higher learning institutions they represent was an essential element of trust.

The research study provided a detailed informed consent form (see Appendix F) that outlined the research, voluntary participation, and the right of participants to withdraw from the study at any point during the research process (IRB, 2014). The IRB suggested that this document must contain the researcher's name and contact information, the specific school for which the research is being conducted, the overarching institution name and mailing address and phone number, the researcher's status within the institution, the name and contact of the supervisor for the research, and contact information for the institution's IRB board. Each of these were contained within the informed consent document (see appendix F), as well as how the informed consent process was to be carried out by the researcher. The informed consent



document also addressed the protocol for the data collection process and provided a brief description of the types of questions that participants could expect, potential risks and benefits of participation, how the data will be secured and destroyed following the completion of the research, and how confidentiality would be maintained.

The identity of each participant was coded numerically and was known only by the researcher, and the informed consent document specified that no participant or associated institutional names would be published within the dissertation, related publications, or presentations of the findings. The telephone or Skype interviews were conducted from the privacy of the researcher's home office and the participants' offices. The semi-structured interview transcripts were considered as raw data and are not included within the appendices of the dissertation document. The audio files were protected and stored on a private, password-protected laptop computer that was secured within a locked office space. Printed interview transcripts were stored in a locked file cabinet that is located within the researcher's private office area. Quotations from the interview transcripts were determined to be worthy of inclusion into the findings chapter in order to add depth and context to the presentation of data in Chapter IV; however, no identifying information about the participant or the schools he or she represented was provided in order to protect confidentiality.

Data Analysis

The data analysis process began by examining 14 academic catalogs and two MPA-relevant course syllabi that were collected from the undergraduate music schools that were represented in the study. Then, the audio recordings from each interview were transcribed into a Word document, which was then added into the NVivo software program that would be used to facilitate the data analysis. NVivo software is a form of computer-assisted



qualitative data analysis software (CAQDAS) that can be used by researchers during the data analysis process. The use of specialized computer software is an essential element of qualitative data analysis and can assist the researcher to organize and synthesize large quantities of data for cross-case analysis (Baxter & Jack, 2008; Rademaker et al., 2012). This use of specific CAQDAS software technology can help to streamline the process of organizing, coding, and categorizing qualitative research data (Rademaker et al., 2012).

Data analysis began concurrently with data collection, and as additional interviews were conducted and academic catalogs and course syllabi were examined, the researcher began looking for the development of emergent themes within the data. The emergent themes can be grouped into categories to allow the data to be clustered into logical classifications (Loh, 2013; Yazan, 2015). The data obtained within the 14 academic catalogs, two course syllabi, and any other relevant documents obtained during the data collection process were examined by the researcher and were summarized and formed the basis for an emergent themes table. The researcher also cross-referenced his personal notes that were made in a field journal at the conclusion of each interview to provide an overall impression of each case, the participant's mannerisms and tone during the interview, and the information obtained during the semi-structured interview. These steps proved to be an effective method for data clustering, the development of categories, and providing contextual data for each case study.

Summary

The methodology chapter began by providing a rationale that justifies the use of the descriptive, multiple case study approach as an appropriate strategy that allowed the researcher to fully address the proposed research questions and objectives. A brief



explanation was provided in order to fully explain why a qualitative research strategy was selected rather than embarking on a quantitative research methodology. The methodology chapter also addressed the convenience sampling approach and how this was utilized to access participants. Sample size in relation to a multiple case study design was discussed, and although there is a lack of consensus within the literature in regards to sample size, a realistic solution to this dilemma was presented. Data saturation was utilized to help ensure that an appropriate number of cases were included within the research study.

Chapter III also presented a discussion on the types of data that were collected, and the strategies that were used in the data collection process. The topic of triangulation was also examined as a highly important method that can be used in case study research to enhance the validity of the findings. A table outlining the procedures that were followed during the research was presented in order to facilitate replication by future researchers. Trustworthiness and ethical considerations for the research study were also fully addressed within Chapter III. Chapter IV presents the findings and the associated themes that developed through the process of data analysis and synthesis.



CHAPTER IV: RESULTS

The purpose of this chapter is to first reiterate the purpose of the research study and its primary research questions, and then set about presenting the data that were collected. Chapter IV begins by restating these objectives and then delves into a short discussion of how the pilot study was conducted and how this impacted the study. Then, a brief description of the sample that participated in the study is presented. The logistics of the data collection process is then presented. Finally, the data analysis and the research results are presented in both text and visual form to provide the reader with a clear understanding of the study's findings. For clarity, the data is presented in the sequence in which the central research questions and their related sub questions are presented.

The purpose of the research study was to examine how undergraduate music schools address the topic of MPA. As of August 2016, no other research has been published within the selected topic area, and many prominent MPA-researchers have indicated that this is an area that is worthy of study and needs to be investigated. These sentiments were also held by many of the curricula administrators, primary instrumental instructors, and licensed mental health care professionals who participated in the research; the overall majority of these administrators, educators, and clinicians supported the need for the development of a conceptual model of how undergraduate music schools address MPA. The research study and its subsequent findings offers a unique approach to investigating the identified research problem, and it is hoped that the findings help to advance the fields of music education and performance psychology.

In the pursuit of answering the question of how undergraduate music schools address MPA, two central research questions and three corresponding sub questions were developed.



These questions align with the purpose and objectives of the research study and are restated here

- Central Research Question 1: What, if any, programs and policies do undergraduate music schools have in place to ensure that students are provided with sufficient MPA coping and prevention strategies?
 - Sub-Question A: What other resources are available within undergraduate music schools to help students who are experiencing MPA issues?
 - Sub-Question B: In lieu of formalized coursework, how do undergraduate music schools ensure that music performance students are provided with sufficient training that enables them to cope with MPA?
- Central Research Question 2: What are the perspectives of curricula administrators, primary faculty members who provide psychological guidance to students and, where applicable, licensed mental health practitioners working within university health clinics in regards to how MPA is addressed within undergraduate music schools?
 - Sub-Question A: What types of agreement exist among the responses of participants in regards to the most effective strategies that are utilized in undergraduate music schools to address MPA issues?

Pilot Study

In order to ensure that the protocol for the semi-structured, Skype or telephone interviews was sound, a short pilot study was conducted. Within the pilot study, four participants, two curriculum administrators, and two primary instrumental instructors were interviewed to determine if the developed interview protocol would yield responses that



would provide the necessary data to answer the research questions and achieve the research objectives. Each of the interviews conducted during the pilot study provided the anticipated insights and data that would serve to answer the stated research questions.

Each of the participants who were interviewed during the pilot study were also given an opportunity to critique the interview questions. Each of the respondents stated that the questions were clear, easy to understand, and were on-point to help examine the phenomenon of how undergraduate music schools address MPA. These responses indicated that no revision was necessary to the interview protocol (see Appendix C), and the research then moved forward into the primary data collection process.

Sample

The recruitment strategy that was initially chosen, gaining access to participants by having individual universities consent to allowing their employees to be interviewed (see Appendix D) proved to be an ineffective method for acquiring the necessary number of participants. This issue was resolved by developing a liaison with key administrators within the College Music Society (CMS), which allowed access to its membership of collegiate music educators and administrators through the distribution of a recruitment email (see Appendix B). The mission statement of CMS is to act as an agent of change and address areas of concern that impact music within higher music education, and this aligned with the objectives of this research study. CMS sent the recruitment email to its members within the states of California, Washington, Oregon, Idaho, Utah, Nevada, Texas, Colorado, and New Mexico, and participants for the research resided and worked at an undergraduate music school within one of these nine states.



The convenience-based sample consisted of individuals who had between 5-40 years of experience within the disciplines of curriculum administration, primary instrumental instruction, and licensed mental health care at the collegiate level. The demographics of the sample of participants was not integral to the topic under investigation, and as such, this information was not the focus of the research. What was important, was that each participant had at least one year of experience as either a curricula administrator, primary instrumental instructor, or as a licensed mental health care professional working within a university mental health care clinic to sufficiently afford him or her with the expertise necessary to provide insightful answers to the interview questions. Each of the study participants well-exceeded the one-year experience criteria that was stipulated in Chapter III. Eight curricula administrators, ten primary instrumental instructors, and one licensed mental health care practitioner made up a sample size of 19 participants, which included 14 male and five female participants who represented 14 undergraduate music schools from nine states within the United States. 14 academic catalogs and two MPA-specific course syllabi completed the sample for the research.

There was also a great deal of diversity between the various undergraduate music schools that were represented in the study. These institutions varied from large public institutions to small private schools. Some of the universities that were represented in the study were renown for their music departments while others were lessor known for their music departments. This diversity helped to ensure that the data collected were drawn from a wide continuum of undergraduate music schools.



Data Collection

The logistics of the data collection process that were outlined within Chapter III were adhered to throughout the research process. Because the study was developed with a triangulation design, there were multiple forms of data that were collected that included 14 academic catalogs, two course syllabi, as well as the interview transcripts that resulted from the participant interviews. These multiple data sources provided the research with 3 units of case analysis.

After each participant completed the informed consent process and scheduled a convenient time and date to participate in an interview, the researcher began the process of investigating the websites of the undergraduate music schools that were represented in the study. This process allowed the researcher to gain an understanding of each school's music performance curricula and the data gathered were drawn from publicly available, online academic catalogs and the relevant course syllabi. Fourteen academic catalogs, one from each of the schools that were included in the study, were downloaded from each institutions' website. The data contained within the academic catalogs and the corresponding participant interviews revealed that there were only two undergraduate music schools that offered courses that specifically included the topic of MPA within their curricula. These two, MPA-relevant course syllabi were downloaded from the websites of both of their associated undergraduate music schools.

The data collection process was not without some challenges, which were encountered during the Skype and phone interviews. These challenges manifested themselves in the form of technical issues with Skype, internet, and telephone services. Numerous dropped calls occurred during both Skype and telephone interviews, which



resulted in several instances where the interviews were interrupted. Most of the participants were gracious and patient in regards to the dropped calls; however, the technical difficulties made it difficult for a few participants to regain their train of thought once the calls were reinitiated, and this required some of the questions to be restated so that participants could complete their responses. One participant dropped out of the research after repeated dropped calls during the interview process and her data were not included in the findings as it was incomplete.

Data saturation for the curricula administrator interviews occurred after conducting eight interviews. There were more varied responses from the primary instrumental instructors so 10 interviews were conducted prior to reaching a point of data saturation. Data saturation also occurred with the data collected from the 14 academic catalogs and two MPA-specific course syllabi as there was very little variance between the data obtained in these documents.

Data Analysis and Results

The data analysis and results are presented in the sequential order that the central research questions and their related sub questions were presented above in order to enhance clarity and organization. The data presented here includes both text and visual displays, and in addition to showcasing the themes that emerged from the data, some of the discrepant data are included to explain the vast array of strategies that undergraduate music schools use to address MPA. In this way, the reader will be able to see that there are many areas of divergence among undergraduate music schools in the types of strategies that are currently in use to address MPA.



The data analysis process began by collecting relevant data from 14 academic catalogs, two course syllabi, the researcher's field notes, and the interview transcripts from participant interviews. Then, the researcher triangulated the data by comparing the document data with the data obtained in the participant interviews. The document data obtained within the academic catalogs and course syllabi supported the interview data and substantiated the accuracy of the participants' responses. Triangulation also occurred as a result of including the perspectives of curricula administrators, primary instrumental instructors, and licensed mental health care professionals working in university mental health care clinics.

Data: RQ1

The data that were collected in regards to the programs and policies that are currently in place within undergraduate music schools to ensure students are provided with sufficient MPA coping and prevention strategies (RQ1) shows that there are few official MPA-specific programs and policies that are currently in place within undergraduate music schools. The 14 academic catalogs, two course syllabi, and participant responses to this research question led to the emergence of these primary themes.

- There is a lack of formalized MPA programs and policies that are specifically designed to help undergraduate music performance students cope with MPA.
- Frequent performance opportunities are in place at every school represented in the study and many curricula administrators and primary instrument faculty members believe that these performance requirements lower students' performance anxiety based upon ongoing, required exposure to high-stakes music performance.
- Master classes and workshops provide a forum where the topic of health and wellness is addressed. MPA is not a required topic within these activities but may



be a topic of focus depending on the course facilitator and the students in attendance.

Participants' interview responses ranged from, We have no official MPA programs or policies that are currently in place to We are currently developing the undergraduate core music performance curriculum to include a mandatory career development course where the topic of MPA will be an area of focus. Based upon the data collected during the research, with only one exception, undergraduate music schools have no formalized programs and policies that are currently in place for the purpose of dealing with MPA. Key words and phrases taken from course syllabi and the coded participant responses to RQ1 were utilized in the creation of a word cloud (see Figure 2 below).



Figure 2. MPA Programs and Policies

One undergraduate music school that was represented in the study had MPA-specific programs and policies in place that extend far beyond frequent performance opportunities.

This university utilizes an "at-risk" program that is used by administrators and faculty



members to help recognize students who may be struggling with MPA issues. A curricula administrator explained, *The at-risk program helps us to identify students who are not performing, stop attending classes and/or lessons, or if they are falling apart onstage.* These students are then required to meet with a music department administrator who provides the student with the appropriate resources to address his or her issues.

This university was also the only school represented within the study to have a Center for Performing Arts Health that is connected to the music school. Within the Center for Performing Arts Health there are licensed mental health practitioners who specialize in working with music performance students and have expertise in the issues that exist within the music performance environment such as MPA. One curricula administrator stated, *The Health and Wellness Center has a program, but the student must first link up with a counselor*.

Data: RQ1 Sub Question A

The data that were collected in regards to RQ1, sub question A, suggests that there are numerous other resources beyond formalized classes, programs, or policies that are available to undergraduate music students who experience MPA issues. This question was answered by examining and synthesizing data from the participant interviews, 14 academic catalogs, and the two MPA-specific course syllabi. Analyzing the coded data revealed three emergent themes that developed in regards to these other existing resources.

 Each of the universities represented in the research provides psychological counseling to students who experience MPA issues as part of their university health center's services.



- Many of the participants in the research questioned the effectiveness of the standard psychological counseling services that were available through university health clinics due to clinicians' unfamiliarity with the music performance environment and MPA issues in general.
- Most of the music departments also offer books (bibliotherapy) and MPA-related
 research articles for reading that can either be recommended by faculty members
 or be accessed within the music library by students who need assistance for MPA
 issues.

In regards to the psychological counseling services that are available to students at the universities that were represented in the research, including some of the participants' responses may provide more context for the reader. One curricula administrator noted:

We have our university counseling service, but they are stretched rather thin, and if a student was to come into my office today and I was to counsel them and suggest that they go over to university counseling to set up an appointment, they probably wouldn't get seen for three weeks.

One of the common issues about psychological counseling services that emerged is that the mental health practitioners working within these facilities generally do not have an understanding of the music performance environment or the stressors that students face.

Another curricula administrator stated, *The university counseling services are there for students to utilize, but that's in the realm of the garden variety of therapy.*

Two of the undergraduate music schools that were represented in the research provided specialized counseling services for their music students. The curricula administrator from one undergraduate music school explained:

We have the Center for Performing Arts Health that is connected to our music school, and we have specialists there that specialize in MPA issues and regularly work with our music and dance students. We also have a performance doctor who comes to our



campus once a week and works with our music and dance performance students to help evaluate and prevent performance-related injuries.

One university was represented in the study by a primary instrumental instructor who is a retired therapist who specializes in working with students on performance-related issues. At my university, students come to see me because I am a retired, Gestalt therapist and I specialize in working with performers, and in particular MPA and performance issues--I've worked with lots of students on this issue. This quality of counseling where the practitioner is cognizant of the environmental context of undergraduate music schools and high-stakes music performance contexts is much more specialized than the psychological services that are available at most of the other undergraduate music schools that were represented in the study. In total then, only two undergraduate music schools provide psychological counseling services by licensed mental health care practitioners who have expertise within the music performance environment and in the treatment of MPA issues.

In order to distill the data collected into a visual medium, participants' key words and phrases from their responses to interview questions and data gathered from 14 academic catalogs and two course syllabi were used in the creation of a word cloud that encapsulates the emergent themes (see Figure 3 below).





Figure 3. Other Resources

Data: RQ1 Sub Question B

The data that were collected in relation to RQ1, sub question B suggests that mandatory or elective coursework that is focused on the psychology of music performance and MPA is nonexistent. Participants' interview transcripts, 14 academic catalogs, and two MPA-specific course syllabi provided the necessary data. The prevailing strategy that undergraduate music schools utilize to ensure that music performance students are provided with sufficient training that enables them to cope with MPA is to allow primary instrumental faculty the latitude to address MPA when MPA issues arise with students. During the analysis of data collected to answer this sub question, a number of themes emerged.

None of the undergraduate music schools that were represented in the study have required or elective classes within their music performance curricula that are solely focused on MPA or the psychology of music performance.



- The topics of MPA and the psychology of music performance are occasionally embedded within, private lessons and performance master classes, wellness master classes, senior recital capstone classes, piano seminar classes, and orchestral careers classes.
- The undergraduate music schools that were represented in the study do not formally address MPA within their academic catalogs or include it as a mandatory topic within the course syllabi of the aforementioned classes.

The participant responses to the semi-structured interview questions indicated that the topic of MPA does come up in some classes, but it is not formally documented in any of the course literature, 14 academic catalogs, or two course syllabi. A primary instrumental instructor provided some context to this issue and stated, *Even though there isn't a* formalized class dedicated to MPA or the psychology of music performance, I incorporate these topics into lessons and performance classes with students in an effort to prepare them to be performers. One course syllabus for a senior recital capstone class did indicate a required textbook *Beyond Talent: Creating a Successful Career in Music*, 2nd edition by Angela Myles Beeching, which does include a small section within chapter nine (performing at your best) that discusses MPA and the physiological components of performance anxiety.

The prevailing response was that undergraduate music schools do not officially ensure that students receive sufficient training that enables them to cope with MPA within their curricula. One participant surmised, *Our curriculum doesn't deal with MPA, and there are no specific MPA or psychology of performance kinds of classes*. Participants' responses indicated that even though there is nothing official within academic catalogs and relevant course syllabi, MPA is addressed primarily by the student's principal instrument instructor.



Key participant interview responses were utilized to develop a word cloud to distill the data that is pertinent to RQ1, sub question B (see Figure 4 below).

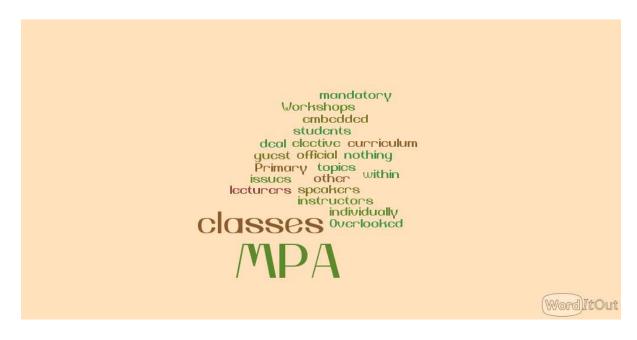


Figure 4. How Undergraduate Music Schools Ensure Students Can Cope with MPA

Data: RQ2

The data that was collected that is germane to RQ2 suggested that on a nearly unanimous level, curricula administrators, primary instrumental instructors, and licensed mental health care practitioners working in university mental health care clinics perceived that MPA is not effectively addressed by undergraduate music schools. One curriculum administrator stated, *My impression is that at the undergraduate level, there's a conversation and an awareness of the issue, but at most schools, there's not a coherent means of addressing an issue that is really problematic for some students, and is at least mildly problematic for most of us.* Data analysis revealed three primary themes that were consistent throughout the data.



- The nearly unanimous perspective from curricula administrators, primary instrumental instructors, and licensed mental health care practitioners working within university health care facilities is that MPA has been and continues to be sorely neglected within music performance curricula, and that it is not effectively addressed at the institutional level by the undergraduate music schools that were represented in the study.
- MPA is not formally addressed within the music department or the music
 performance curriculum and is left to the discretion of students' primary
 instrument teachers to deal with during private lessons when students experience
 MPA.
- The majority of the undergraduate music schools that were represented in the research do not have any formalized means of proactively addressing MPA, and are therefore, left to react when serious MPA issues arise among students.

It is important to note that two participants offered a completely different perspective on how their undergraduate music schools addressed MPA. One participant stated, *I think we do a really good job, and it's definitely on our radar now that we have revamped the undergraduate music performance curriculum.* The other participant stated, *We have been actively promoting providing career-type advice and coping mechanisms about how to cope with stress and sustain a long-range performance career.* These two participants out of a total of 19 participants were the only individuals who offered a positive review of how their undergraduate music schools addressed MPA. The overwhelming perspective of participants in regards to how MPA is addressed within their respective schools is that the issue has been ignored and neglected at the institutional level. In order to provide a visual display of the



data that was collected for the purpose of answering RQ2, a word cloud was created (see Figure 5 below).



Figure 5. The Perspectives of Participants in Regards to How MPA is Addressed

Related to RQ2 was asking primary instrumental instructors their perceptions of why undergraduate music schools largely fail to address MPA in their music performance curricula. Including this data here provides some context to the participants' perceptions of how their respective undergraduate music schools address MPA. This data also serves to strengthen our understanding of the way in which undergraduate music schools have been dealing with the topic of MPA. The following response from a participant provides some insight into why many undergraduate music schools fail to address MPA within their music performance curricula:

Schools aren't effectively addressing MPA for the same reasons that they haven't had the healthy musician classes. We are slow to catch up on the importance of this. People see the relevance and how valid it is, but are now having problems finding



room in the degree program to add more credits. I think everyone acknowledges its importance, but we can't go beyond 120 credit hours, and what do we get rid of in the curriculum in order to add an MPA-specific class?

It became apparent during the analysis and interpretation of this element of the data that there are many layers that need to be examined in order to fully understand the way in which MPA is currently dealt with in undergraduate music schools. From a purely accreditation standpoint, there are no mandates at this point in time from the primary governing organization, The National Association of Music Schools (NASM) in regards to how undergraduate music schools should deal with MPA. One participant stated, *Perhaps this can be like how the healthy musician classes became a requirement for accreditation, maybe MPA or the psychology of music performance classes will become a requirement for accreditation in the coming years.* The healthy musician classes that have been required by NASM primarily deal with the physical health components of music performance, and one participant explained:

You'll find any of the accredited schools are now required to have that element, and sometimes these focus on the performance elements of anxiety but, most of the time they focus on how the body works – the breathing and what to do to get longevity in a performance career.

Examining the perspectives of participants on the culture and tradition that are present in today's undergraduate music schools helps to reveal how MPA is viewed by those within the department of music. One participant offered:

I think that they (administration) don't even address it or acknowledge it as a problem--they don't think it needs to be addressed in a class – they are thinking nuts and bolts and an extra class would be more money and is it really necessary?

Another participant offered some contextual insight into the culture that is present in undergraduate music schools and stated:



There are a lot of faculty that are not very good at responding to MPA and it is a dirty little secret and has been for a few generations. In the same way that people don't want to talk about injury – certainly amongst musicians there is this feeling of--if you're nervous--people constantly try to deny it.

Evaluating and interpreting this data provided a deeper understanding of how MPA is regarded within undergraduate music schools and several themes emerged as to why MPA is largely ignored within the music performance curricula of the undergraduate music schools that were represented in the study.

- From a practical standpoint, it may not be addressed within the formal curricula because of resource limitations, such as the financial implications of adding a class and hiring a qualified instructor who could teach the class.
- MPA is not generally acknowledged as a serious issue, and the behavior is not normalized within the culture of undergraduate music schools.
- In order to add a class that is focused on MPA or the psychology of high-stakes music performance, one of the preexisting classes would need to be deleted--there is concern that simply exceeding 120 credit hours for a music performance degree curriculum would discourage prospective students from enrolling in a particular school.

Many of the participants' responses to this question indicated that the topic of MPA is a sensitive one among faculty and administrators within undergraduate music schools. One participant provided some insight into the historical background of MPA in undergraduate music schools by stating:

It was never modelled for us and I think we (music faculty in higher education) all came from programs where this issue was not formally addressed – I think we as a class of people just haven't taken seriously the opportunity to be strategic about this kind of instruction.



Another participant stated:

I think there might be a little bit of a hesitation to put our students through something that most of us teachers don't even know how to address properly, and there is probably some discomfort with this issue as a whole.

This is clearly a polarizing issue, and an alternate perspective that arose in the responses to this interview question was that the scope of the existing MPA issues among undergraduate music performance students is too small to warrant changing the music performance curricula. This perspective was explained by a curricula administrator who stated, *More than anything, the number of music performance majors who have significant MPA issues is small--I can only think of one or two students who are in the pipeline of dealing with this issue, and the scope of the felt need is quite small.* Another participant stated, *It's not a topic that comes up frequently.* The viewpoint of these administrators is that MPA is better addressed on an individual basis rather than forcing all students to participate in a mandatory class that is dedicated to the topic of MPA and the psychology of music performance.

In order to condense the data that were collected in relation to why undergraduate music schools largely fail to address MPA within their curricula, a word cloud was created (see Figure 6 below).





Figure 6. Why Undergraduate Music Schools do not Address MPA Within Curricula

Data: RQ2 Sub Question A

The data that were collected in order to answer RQ2, sub question A, focused upon what types of agreement exist among participants in regards to the most effective strategies or best practices that are utilized in undergraduate music schools to address MPA issues. A wide range of strategies are currently in use within undergraduate music schools by instrumental teachers to help students cope with MPA. This data is presented in two parts, the logistical strategies of how students with MPA issues are provided with assistance and the specific psychological-based strategies that are employed will be presented. Several themes emerged from this data in regards to the logistics of how undergraduate, instrumental instructors assist students who experience MPA issues.

Dealing with MPA within undergraduate music schools is primarily undertaken
on an individual basis between applied instrumental instructors and students
within the environment of private lessons.



- The primary group strategy that is currently in use to address MPA is incorporating workshops and guest lecturers into performance master classes.
- None of the undergraduate music schools that were represented in the research utilize any formalized, MPA-specific assessment tools to evaluate the severity of students' MPA issues.
- The prevailing thoughts of primary instrumental instructors are that the most effective strategies are tailored to the individual who is experiencing MPA issues.
- The predominant mindset among all of the curricula administrators and primary instrument instructors who participated in the research is that the more public performance experience and opportunities that a student has, the more comfortable he or she will be performing in the high-stakes music performance environment.

As the data suggested in regards to the nonexistence of mandatory or elective classes that are devoted to teaching students about how to cope with MPA and the psychology of music performance, each school that was represented in the research relies heavily upon primary instrumental instructors to deal with students' performance anxiety issues. Each of the primary instrumental instructors who participated in the research concurred that this is the current standard that is in place in the undergraduate music schools that were represented in the study. One participant stated, *There is nothing specific within the music performance curriculum for dealing with MPA issues, and students would be dealing directly with their applied instructor to work on any performance anxiety problems*.



The one exception to this is that, on occasion, workshops and guest lecturers who have expertise on MPA will be incorporated into master classes. Many of the universities that were represented within the research employ this technique at the discretion of faculty members. A primary instrumental instructor explained, *Occasionally, we will bring in a guest lecturer who specializes in a specific topic such as performance anxiety*. Often these workshops or lectures are conducted within master classes where the faculty members select the topics to be covered based upon their perception of students' needs. None of the 14 academic catalogs or two course syllabi specifically mentioned the topic of MPA would be covered within workshops or master classes.

Recognizing the existence of a problem is also something that is incumbent upon students' applied instructors. One of the primary instrumental instructors clarified this point and stated, *I think at the end of the day, if the teacher doesn't identify the issues with the student, there is not going to be any change - I think it's both the student being willing to talk about their issues, and if the teacher doesn't probe a little bit, nothing will be effective.* These one-to-one conversations between teacher and student are the primary means of assessing the severity of students' MPA issues within the schools that were represented in the study. One primary instrumental instructor commented, *The first step is to identify a problem with a student, and that is something that is often initiated in a conversation between the teacher and the student.*

The only other assessment strategy that is in use at the undergraduate music schools that were represented in the study is the evaluation or observation of how a student performs during recitals, auditions, performance workshops and examination juries. This sentiment was crystallized by several participants who stated, *The proof is always in the performance*.



None of the participants in the research were aware of any MPA-specific assessment tools, and no formalized MPA assessment tools are currently in use at any of the undergraduate music schools that were represented in the research. One participant summarized the MPA assessment process and stated, *Assessment is done based upon how they perform during recitals, and it's in the quality of the performance – unfortunately, that's the only thing we really have in place*.

One of the fundamental strategies utilized by all of the primary instrumental instructors who participated in the research is to normalize the behavior and to share with students that they are not alone in the MPA experience. One participant best summarized the concept of normalizing the behavior by stating, *The social element is also important, and students need to understand that they are not the only ones who go through these types of issues*. The majority of the instrumental instructors also believed that being open and candid with students about their own personal struggles with MPA is a helpful strategy to gain the trust of students. These teachers use the strategy of talking about their own MPA issues as a way of normalizing the behavior for students and as a way to begin open and honest communication with students about performance anxiety.

Another commonality in regards to dealing effectively with students' MPA issues was that MPA is a highly unique issue and what works for one person does not necessarily work for another. One participant summarized, *Every person is different, and dealing effectively with MPA issues first depends on what the individual's experience is like rather than me have a contrived method.* Another primary instrumental instructor suggested, *There don't appear to be any clear, surefire, bulletproof solutions, although there are a lot of*



different strategies, it becomes a question of implementing them and finding the ones that work in a given scenario.

Performance opportunities are regarded as a highly effective strategy for helping students overcome their MPA issues. There is universal agreement on this issue among all those who participated in the research that providing numerous performance opportunities and experiences is an effective approach that is used to make students become more comfortable with the high-stakes music performance environment. These performance opportunities begin with informal performances in low-risk situations usually playing for friends and peers and gradually increase in stress level up to the senior recital performance environment. One participant stated, *The graduated levels of performance opportunities help students to become desensitized to the uniqueness of high-stakes music performances and part of becoming comfortable with performing is just doing it in a lot of circumstances.*These logistical elements and strategies of how instrumental instructors assist students with MPA issues are presented visually in a word cloud (see Figure 7 below).



Figure 7. The Logistical Strategies of Primary Instrumental Instructors.

RQ2: Sub question A: Best Practices

The data that were collected in regards to the specific psychological-based strategies that are currently agreed upon as best practices by curricula administrators, primary instrumental instructors, and licensed mental health clinicians working within undergraduate music schools suggest that a wide variety of strategies are in use to help students cope with MPA issues. This speaks to the notion that MPA intervention strategies are best designed to fit the individual rather than having a predetermined program that is used for all students struggling with MPA. In analyzing and interpreting the relevant data on the best practices that are currently in use at the undergraduate music schools that were represented in the study, a number of themes began to emerge.

 A majority of primary instrumental instructors begin working with students who are experiencing MPA issues by engaging in psychoeducation via bibliotherapy,



- which focuses on teaching students about the physiology of arousal and the psychology of music performance through recommended reading materials.
- Many of the participants utilize the psychological coping skills of deep breathing,
 progressive muscle relaxation, and positive self-talk to help students learn to
 moderate their pre and during-performance arousal levels.
- Journaling is a common approach among primary instrumental instructors for
 assisting students who are suffering from MPA, and this forms a foundation for
 post-performance debriefing and the use of cognitive restructuring, which is a
 component of cognitive behavioral therapy (CBT).
- Other strategies that are commonly utilized by primary instrumental instructors
 are positive imagery, simulated performance practices, Alexander technique and
 body mapping, neuro-linguistic programming, and biofeedback.

Psychoeducation via bibliotherapy is a highly prevalent technique currently in use within undergraduate music schools as an approach to helping students cope with MPA issues. The Inner Game of Music is the most widely utilized MPA book that is currently in use at the undergraduate music schools that were represented in the research. One participant stated, Mentally, I refer to The inner game of music, which is quite helpful as it includes instruction on conducting meditations, relaxation, and creating the ideal performance scene that I use with my students. Eight of the ten primary instrumental instructors who participated in the research recommend The Inner Game of Music (Green & Gallwey, 1986) and various other MPA-specific books to students. Among the other books that are popular among primary instrumental instructors as resources for students facing MPA problems are:

My Lessons with Kumi: How I Learned to Perform with Confidence in Life and Work by



Michael Colgrass, *Performing in the Zone* by John Gory, *The Art and Technique of Performance* by Richard Provost, and *Performance Excellence* by Aaron Williamon.

A great deal of agreement also exists among the responses of participants in regards to the use a psychoeducation as an effective method in helping students who experience MPA problems. The global viewpoint among the primary instrumental instructors who participated in the research is that teaching students about how the arousal process works within the physical body is the first step in overcoming the effects of MPA. One primary instrumental instructor stated, *We examine the whole physiological process, and if students understand a bit more about why they are getting nervous or anxious in the performance environment it is more likely that they can learn how to control these responses.* This can help music performance students to better understand what happens on a physiological level when they perceive the performance environment as a threat. One participant stated:

The first thing I do is reassure them that anxiety is a common bodily response to any perceived threat, and I explain to them that it is based in our neurological responses and the survival instincts of fight or flight.

One of the ubiquitous strategies currently in use to help students to combat the physiological manifestations of over arousal is employing deep breathing and relaxation techniques like progressive muscle relaxation (PMR). A primary instrumental instructor explained:

I teach these students the concept of controlled breathing, taking deep breaths and regulating the exhalation process, and how the conscious muscle responses to control the autonomic responses can change the blood chemistry and send a message to the adrenal system that the danger or perceived threat is over.

The use of deep breathing provides a simple and immediate strategy to help students regulate their arousal levels, and understanding what their optimal arousal level should be is regarded



as a key component of coping with MPA. One participant posited, *Some students are simply* confused about where their arousal levels should be prior to engaging in a performance.

Biofeedback is another widely utilized strategy that relates strongly to the physiological manifestations of MPA and is commonly used by primary instrumental instructors as a way of helping students cope with MPA. More specifically, biofeedback is utilized as a way to help students control the physiological symptoms that are commonly experienced with MPA, such as increased heart rate, muscular tension, increased perspiration, or rapid and shallow breathing. One participant explained, *I teach students biofeedback and the various things that they can do to work against that overproduction of adrenaline and the feeling that is nervousness*.

Another popular strategy that is connected to relaxation strategies and the regulation of students' arousal levels is known as journaling, which requires the student to keep a written record of each of the performances in which they participate. This technique allows music performance students to keep a record of their music performances and their associated arousal levels prior to and during these events. One primary instructor stated, *I* ask my students to journal whenever they play, and write down the arousal level they felt they needed for a given event, and what their actual arousal level was. Some primary instrumental instructors who participated in the study felt that journaling provided music performance students with a way to keep track of their performance successes, and this helps to increase their confidence in their performance abilities. One participant stated, Journaling can help to build psychological confidence because it allows students to read about what they've been doing and how they are improving, so it's a great way of gauging their success.



Journaling also provides a foundation for primary instrumental instructors to utilize the strategy of debriefing. Seven of the participants who participated in the research engage in post-performance conversations with their students and used debriefing as a way to help students come away from each performance with some practical knowledge of their successes and areas that need further improvement. One primary instrumental instructor summarized, *After performances*, *I talk with the student about his or her performance experience and talk about helping them develop in that way*. Post-performance debriefing helps to initiate conversations between student and teacher, and one participant stated, *When they perform in front of others, they have some way of knowing how they felt and how it impacted their playing*.

Journaling is also used by some primary instrumental instructors to utilize the strategy of cognitive restructuring with students, which is a common component within the discipline of cognitive behavioral therapy (CBT). One participant summarized:

I have students keep a notebook throughout their day of all their negative thoughts that enter their minds, and show them how to counter these and turn them into positive thoughts because MPA is more than just what happens on stage and it requires changing your daily habits and thinking.

Six of the participants then recommended that students counter their negative thoughts with positive thoughts, and promoted the use of positive self-talk as a way to prepare for important music performances. One primary instrumental instructor summed up cognitive restructuring, *Sometimes it's a shift in mind that the audience is there to support you – not to see you fail, and sometimes it's a long process to get students to feel that way going up on stage*.

Positive imagery and simulated performance practice are also widely regarded by primary instrumental instructors in undergraduate music schools that were represented in the



research as effective strategies for helping students deal with MPA issues. One participant summarized how these techniques are utilized and stated, *I encourage students to practice* performing so that they are visualizing that they are playing in front of an audience – I have them leave the practice room, walk in, bow, sit down, and then perform their repertoire. Eight of the primary instrumental instructors noted that using positive imagery and simulated performance practice helps to improve the confidence levels of music performance students, and this strategy can benefit them by making them feel more comfortable once they get to the actual performance environment.

The practice of the Alexander Technique and the closely related strategy of Body Mapping are both common practices among the primary instrumental instructors who participated in the research as a helpful strategy for assisting students who are facing MPA. Often these topics are included in performance workshops where guest speakers who have expertise in these methods conduct workshops to help educate students on how The Alexander Technique and Body Mapping can be used to improve how students cope with high-stakes music performances. Both of these techniques are regularly occurring topics in performance-based workshops at the undergraduate music schools that were represented in the study.

Positive self-talk or neuro-linguistic programming (NLP) is another strategy utilized by several of the primary instrumental instructors who participated in the research as a method of helping undergraduate music performance students cope with MPA issues. One participant stated, *I have used neuro-linguistic programming and I introduce it to all of my students--I have found it to be very helpful for students*. One primary instrumental instructor stated, *I utilize NLP to help students facing MPA issues because it's a way to say things to*



get your message across under the super-ego, and it can be thought of as positive feedback. Changing the performer's negative internal dialogue and replacing it with positive thoughts and statements was an important strategy that is widely used by the primary instrumental instructors who participated in the study.

Each of the aforementioned best practices that are in use within undergraduate music schools to help students facing MPA issues has been included in a chart (see Figure 8 below).

and Bibliotherapy	Arousal Regulation: Deep Breathing and Progressive Muscle Relaxation	Biofeedback	Journaling	Performance Debriefing
Cognitive Restructuring	Positive Imagery and Simulated Performance Practice	Alexander Technique	Body Mapping	Neuro-Linguistic Programming

Figure 8. Best Practices: Psychological Skills Strategies in Widespread Use.

Other Strategies

A number of other strategies are also utilized by primary instrumental instructors to assist undergraduate music performance students who are facing MPA-related issues. These strategies were endorsed by single participants in the research and thus do not represent MPA strategies that have agreement or consensus within undergraduate music schools. Among



these lesser utilized MPA strategies are hypnosis; making students aware of prescription medications, such as beta-blockers and anxiety medications; meditation; mindfulness training; self-hypnosis; and emotion replacement therapy strategies. These other strategies are included here for the purpose of identifying the wide range of psychological strategies that are utilized within the undergraduate music schools that were represented in the research.

Summary

This chapter has presented the data that were collected during the research and has presented the findings both in text and visual forms to provide a deeper understanding of how undergraduate music schools address MPA. Key participant responses to the semi-structured interview questions to illuminate topics of agreement, as well as areas of divergence were included to provided rich and contextual descriptions of how the undergraduate music schools that were represented in the research address MPA. 14 academic catalogs and two MPA-specific course syllabi were also discussed as these documents were part of the sample and provided essential data. The multiple data sources provided a more comprehensive examination of how MPA is addressed within undergraduate music schools.

The process of triangulating the data from 14 academic catalogs, two course syllabi, and interview transcripts allowed for a number of themes to emerge and provided answers to the research questions. The themes that emerged from data analysis were that the undergraduate music schools represented in the study do not have sufficient MPA policies, procedures, or offer required or elective MPA-specific classes within their curricula. The two schools that do address the topic within their curricula do so by embedding the topic into existing classes. Other key themes that emerged within the data were that students' primary instrumental instructors are their primary resource for coping with MPA and that there was



consensus among the participants that performance opportunities are believed to be an effective strategy for helping students overcome MPA issues. Chapter V presents a discussion and interpretation of the findings and explore the topic of how the research findings may influence future practice within the fields of music education and performance psychology.



CHAPTER V: DISCUSSION

The purpose of this chapter is to present a discussion of the findings that were presented within chapter IV and interpret the meaning of this data and how it may contribute to the future practice in the disciplines of undergraduate music education and performance psychology. This chapter begins by restating the purpose of the research and reviews the need for conducting the research. Then, a restatement of the research problem and the research questions that guided the study are presented. Afterwards, a brief review of the findings that were presented in chapter IV are briefly restated, and this is followed by an interpretation of the findings, and then, a conceptual model based upon the findings are presented that provide a visual distillation of how the undergraduate music schools represented in the study are currently addressing MPA. Finally, the limitations of the study, its implications for theory, research, and practice, recommendations for future research, and a conclusion are presented.

One of the unique aspects of the research presented herein is that it is the first research of its kind, and, as such, the findings do not converge or diverge with any previously published research. The existing gap in the available research was presented in Chapters I and II, and the nonexistence of published data in regards to how undergraduate music schools address MPA underscores the need for the research study that is presented in this document. During the course of the research, it also became apparent that the majority of curricula administrators, primary instrumental instructors, and licensed mental health professionals who participated also saw a need for the research to be conducted. A number of these participants commented at the conclusion of their semi-structured, phone, or Skype



interviews that they felt it was about time that research was conducted to examine how undergraduate music schools were addressing MPA.

The general problem is that the prevalence rates of MPA are averaging over 20% among undergraduate music performance students. Chronic MPA and over-arousal during music performance is a crucial issue that impacts the psychological health of musicians, and contributes to lowered performances abilities for approximately 21% of undergraduate music performance majors (Osborne et al., 2014). Research findings have also demonstrated that prevalence rates of MPA are highest during the undergraduate years (Patston, 2014). The specific problem is that few, if any, undergraduate music schools have implemented specialized coursework into music performance curricula that effectively prepares students to effectively cope with MPA issues. The research was driven by two central research questions and three related sub questions.

- Central Research Question 1: What, if any, programs and policies do undergraduate music schools have in place to ensure that students are provided with sufficient MPA coping and prevention strategies?
 - Sub-Question A: What other resources are available within undergraduate music schools to help students who are experiencing MPA issues?
 - Sub-Question B: In lieu of formalized coursework, how do undergraduate music schools ensure that music performance students are provided with sufficient training that enables them to cope with MPA?
- Central Research Question 2: What are the perspectives of curricula
 administrators, primary faculty members who provide psychological guidance to
 students and, where applicable, licensed mental health practitioners working



within university health clinics in regards to how MPA is addressed within undergraduate music schools?

 Sub-Question A: What types of agreement exist among the responses of participants in regards to the most effective strategies that are utilized in undergraduate music schools to address MPA issues?

The data that were collected during the research allowed each of these questions to be answered via documents and semi-structured phone or Skype interviews, and participants' responses offered rich descriptions and contextual background information that provided a deeper understanding of the ways that undergraduate music schools address MPA. In response to RQ1, the findings suggest that programs and policies that are designed to help ensure that undergraduate music students are provided with sufficient MPA coping abilities are virtually non-existent among the schools that were represented in the study. The findings pertinent to RQ1, sub question A suggest that there are minimal other resources that are available to undergraduate music students who are facing MPA issues. The data that were collected in regards to RQ1, sub question B suggest that undergraduate music schools do not fully ensure that music performance students are provided with sufficient training that enables them to cope with MPA. The findings show that each of the schools represented within the research left MPA-specific training and coping strategies to the domain of students' primary instrumental instructors, yet there is nothing documented within any of the academic catalogs or course syllabi that confirms that MPA is being addressed during private lessons or master classes.

The findings related to RQ2, suggest that an overwhelming majority of participants who took part in the research felt that MPA is either neglected entirely within the music



performance curricula or is fully overlooked by their respective schools. The exceptions to these findings were the perceptions of two of the participants who believed that their respective schools were doing a good job of addressing the issue of MPA. The data that was collected in regards to RQ2, sub question A suggest that there was a consensus among all of the participants on the efficacy of performance opportunities and performance experience as an effective strategy for helping students overcome MPA issues. Additionally, there was agreement that the use of psychoeducation, bibiotherapy, arousal regulation, biofeedback, journaling, performance debriefing, cognitive restructuring, positive imagery and simulated performance practice, Alexander technique and body mapping, and NLP were all regarded as effective strategies for helping students to overcome MPA issues.

Interpretation of the Findings

On the surface, the data suggests that none of the undergraduate music schools that were represented within the research formally addresses MPA within their music performance curricula. That does not mean that MPA is fully overlooked within these schools. Rather than address MPA in a formalized, classroom-based fashion, MPA is primarily addressed on an individual basis by students' primary instrumental instructors and is seldom addressed within the classroom. There are some schools, however, that do imbed the topics of MPA and the psychology of music performance into pre-existing classes. Some of the curricula administrators and primary instrumental instructors explained that embedding is a less formal approach than making permanent curriculum changes, and it allows schools to include new topics into pre-existing classes.

Upon researching this further by scanning the relevant schools' academic catalogs and course syllabi, the only indication that the topics of MPA or the psychology of music



performance are imbedded into existing classes was found within one school's senior recital capstone class. Within the senior recital capstone class syllabus, the required textbook *Beyond Talent: Creating a Successful Career in Music*, 2nd ed. by Angela Myles Beeching is listed. Within this textbook, chapter nine includes a small section that is focused on MPA and the psychology of music performance. Another school that was represented in the study embeds the subject of MPA and the psychology of music performance into a percussion methods class that utilizes a required textbook *Performing in the Zone* by John Gorrie, which focuses extensively on the topics of arousal and the psychology of music performance in pressure situations. This textbook is listed in the course syllabus as required reading for students who enroll in the class.

The strategy of embedding, however, is the exception, and only two of the music schools that were represented in the research currently utilize this strategy. One other undergraduate music school is in the process of adding this concept to its undergraduate core curriculum where a new career development class is being added, and MPA is one of the topics that will be covered. Although 14 undergraduate music schools were represented in the research, only two of them currently make any reference to addressing MPA within their curricula within the syllabi for the aforementioned classes byway of their required textbooks. These textbooks, however, are the only indicators that MPA is a topic to be covered in these classes. The process of triangulation provided a deeper contextual understanding of how MPA is embedded within some schools' pre-existing curricula.

Reviewing the field notes that were recorded at the conclusion of each semi-structured interview, it became apparent that a dichotomy existed among the participants in regards to how important the issue of MPA is perceived to be within the



culture of the undergraduate music schools that were represented in the study. Two of the curricula administrators who participated in the research were of the belief that MPA was not an important issue within their respective schools and did not think that it warranted any change to their music performance curricula. One participant in response to a query about why the large majority of undergraduate music schools fail to formally address MPA within their music performance curricula stated, *I would be surprised if that is true*. The perspective that MPA is not an important issue or that it impacts few undergraduate music performance students is not congruent with the available research. It may be possible that a level of denial exists in some undergraduate music schools in regards to the prevalence of MPA among undergraduate music students or the perceived importance of addressing it within the music performance curriculum. The researcher's field notes from both of the above mentioned interviews speculated that both of the participants denied the existence of MPA as a significant issue.

The remaining 17 participants, however, were of the mindset that change is necessary in order to more effectively address MPA within their respective music schools. The findings in regards to changing the music performance curricula show that at most universities, this is a time-consuming process that can take years to accomplish. The undergraduate music schools that are proactively addressing MPA and making immediate changes to their music performance curricula are doing so by embedding the topic of MPA into pre-existing classes as a topic to be covered. Two schools represented in the research are currently embedding the topic of MPA and the psychology of music performance into existing classes, while the other 12 schools do not currently address MPA in any official capacity within their curricula, academic catalogs, or course syllabi.



The process of embedding the topic of MPA into preexisting classes seems to enable undergraduate music schools to facilitate changes to the curricula without embarking on a time-consuming process of gaining departmental, university, and State approval that is often required for a new class to be added into the music performance curricula. The act of embedding MPA and the psychology of music performance topics into currently existing classes appears to be an effective short-term solution. One music educator at a highly regarded music school where MPA topics were imbedded into the existing curricula found this to be an effective solution and noted that in the 10 years since implementing this strategy, no students had abandoned the school's music performance degree program as a result of MPA issues (Patston, 2014).

One of the most important findings of the research is that each of the undergraduate music schools that were represented in the study seem to be informally placing the responsibility of assisting students facing MPA issues predominately on students' primary instrumental instructors. Only one of the primary instrumental instructors that participated in the study had the appropriate licensing and expertise to be properly equipped to assist students experiencing MPA issues. The other nine primary instrumental instructors have been reliant on their own personal performing experiences, and this may be cause for concern given the available research on this topic. Research findings have shown that nearly 30% of musicians withdraw from their careers in professional performance due to severe MPA issues, and many of these same individuals go on to work as collegiate music educators (Patston, 2014). The available research and the lack of specific MPA training and expertise does call into question the rationale of having students' primary instrumental instructors acting as the primary source of assistance when students experience MPA issues.



The findings suggest that if primary instrumental instructors are going to continue to be responsible for helping students cope with MPA issues within undergraduate music schools, these individuals could benefit greatly from MPA training or certification programs that would better qualify these individuals to provide psychological guidance to students. The current strategy does not guarantee expertise or competency in dealing with MPA and this was summarized by a participant who stated, *I have no formal training, and have never really studied psychology*. The primary tool that all of the participants rely upon for helping them assist students who are experiencing MPA issues is their past performing experience and their own personal struggles with MPA. This by itself may not be enough to ensure that students are getting the right kind of help that would enable them to effectively cope with MPA. Primary instrumental instructors and their respective schools may be contributing to the proliferation of students' MPA struggles if they are not fully competent in psychological coping strategies or have training in psychology (Patston, 2014).

One of the alarming findings of the research study was that there was universal consensus among the participants on the belief that more performance experience and performance opportunities are an effective strategy for helping students overcome their performance anxiety issues. All but one of the undergraduate music schools represented in the research utilizes performance opportunities as their primary MPA program or policy that is in place for ensuring that students can deal with the pressures of high-stakes music performance. The one exception to this was explained in Chapter IV where one undergraduate music school utilizes an "at-risk" program to help identify students who may need guidance. This finding suggests that undergraduate music schools are overly reliant on systematic desensitization to the music performance environment through repeated exposure,



and performance opportunities may not be an effective strategy for every student. Research conducted with professional musicians has indicated that at the elite level, even with a great deal of stressful performance experience, MPA continues to be of great concern for nearly all of these individuals (Patston, 2014).

Examining the available research on the efficacy of performance opportunities and performance experiences shows that in order to be effective, these performance opportunities must begin with low-stress performances that do not result in negative experiences. Providing music students with abundant low-risk performance opportunities prior to those that are more stressful may be an effective strategy for ensuring that these scholars perceive the act of public performances as enjoyable (Osborne & Kenny, 2008). Only a select few of the undergraduate music schools that were represented in the research utilize the concept of graded performance opportunities that begin with casual performances for friends, peers, and family members, and gradually increase towards examination juries and recitals. Some undergraduate music schools and their students may benefit from further refinement of the performance opportunities that are currently in place by ensuring that students do not encounter highly stressful performance environments prior to developing their comfort with high-pressure performance environments. Research findings have shown that music scholars who have experienced past performing experiences that were damaging score higher on MPA assessment inventories and are a heightened risk for experiencing MPA during subsequent performances (Osborne & Kenny, 2008).

The findings in regards to RQ2, sub question A suggest that even though there is agreement into the use of eight MPA coping strategies (See Figure 8, p. 108) within undergraduate music schools, there does not appear to be any comprehensive coping



strategies that are in use within the schools represented in the research. Although primary instrumental instructors are savvy enough to tailor the MPA-strategies they utilized based upon the student and his or her experiences, they are not currently using multiple strategy-based interventions that are often referred to as preperformance routines. Often, preperformance routines include deep-breathing, positive imagery, positive self-talk, and goal-setting skills that are utilized in the sport performance domain, and research suggests these preperformance rituals are also effective in performance art disciplines. Research findings have shown that professional musicians utilized preperformance routines in the days and hours leading up to stressful performances, and undergraduate music students have also found these routines to be more beneficial in coping with the stressors of high-stakes music performances than using singular coping skills strategies (Clark & Williamon, 2011).

One of the primary inferences that can be made from the findings is that because the undergraduate music schools that were represented in the study are overly reliant upon performance opportunities and performance experiences as their primary program or policy for ensuring that students can effectively cope with MPA, these schools and their students may benefit greatly from the implementation of psychological skills training workshops or classes. Workshops or classes that are facilitated by qualified and licensed mental health care practitioners who have expertise in training music students how to utilize mental skills within the music performance environment may substantially improve students' abilities to benefit from performance opportunities and experiences. Research conducted on the implementation of a short, psycheducational workshop that was delivered by a licensed psychologist and was designed to teach musicians how to utilize a diverse range of mental



skills techniques was shown to be effective in reducing participants' anxiety levels and contributed positively to improved performance outcomes (Hoffman & Hanrahan, 2012).

Interpreting the overall findings of the research shows that undergraduate music schools as a whole have begun to embrace the need for change in the ways that MPA is addressed. One of the underlying themes that emerged during some of the participant interviews was that perhaps these changes could be accelerated if a governing body within the discipline of higher music education such as NASM or CMS were to mandate policies on how undergraduate music schools must address the issue of MPA. Perhaps this would help to eradicate the way that many schools have overlooked and neglected this topic in their curricula and begin the process of developing a standardized way that provides every undergraduate music performance student with the appropriate tools and resources that allow them to develop as performers as well as musicians.

Limitations of Study

One of the primary limitations affecting the transferability and validity of the study is the sample size. There were 19 total participants representing 14 undergraduate music schools in nine states within the United States and this is not sufficient for transferability. The small sample size of the study would limit the transferability of the findings to the overall population of undergraduate music schools in the United States. The data collected, however was triangulated between multiple data sources and did result in a great deal of data saturation. Findings then, may be partially representative or indicative of how some undergraduate music schools within the U.S. address the issue of MPA. It should also be noted that there were vast differences in the undergraduate music schools that were represented in the study in regards to their geographical location, size, and institutional type



(private or public), and the findings thus offer the perspectives of participants from a diverse range of higher learning institutions.

In regards to the change of recruitment strategies that were necessary during the research, this alternative methodology streamlined the recruitment process and in and of itself did not impose any additional limitations on the study. Utilizing a professional organization like CMS provided access to a wide range of music education professionals who possessed a high level of expertise in their roles. Accessing the sample in this way did not impose any additional limitations on the research study.

Reflecting upon the research process, the researcher gained a great deal of valuable insight into how undergraduate music schools address MPA. The perspectives of the research participants helped to illuminate the existence of several strategies that are in use at undergraduate music schools that extend beyond the formalized music performance curricula as viable avenues to address MPA. These insights helped to dispel some of the researcher's preconceived notions that undergraduate music schools are completely ignoring the issue of MPA. While there are instances where this may be the case, a great deal of change is beginning to occur within undergraduate music schools to address the issue of MPA.

In regards to the researcher's influence on the participants within the research study, the researcher attempted to remain neutral and unbiased while conducting the semi-structured phone or Skype interviews. The priority while conducting the interviews was to provide a safe and trustworthy rapport between researcher and participant that would allow for the sharing of each individual's true beliefs and experiences in regards to how their undergraduate music school addresses MPA. With few exceptions, participants in the study



were willing and candid about offering their personal views and feelings about how the schools they represented were handling the issue of MPA.

As a result of conducting the research and analyzing and interpreting its findings, the researcher has experienced a few changes in thinking that were in place during the design of the research. Primarily, the researcher now understands that there are many considerations and regulations that may be prohibiting undergraduate music schools from implementing formalized MPA classes into their music performance curricula. The researcher now understands that failure to change the music performance curricula to address MPA does not necessarily mean that undergraduate music schools are fully neglecting the issue of MPA. It also became apparent that in order for change to occur, undergraduate music schools first need to acknowledge that MPA is a significant problem and warrants their attention.

Implications for Theory and Research

The theoretical framework for the research study involved the field of undergraduate music education and, specifically, how undergraduate music schools address the issue of MPA. Because no other research has been published on this topic, little is understood in regards to how undergraduate music schools address MPA, and combining the information contained in academic catalogs and course syllabi with the perceptions of curricula administrators, primary instrumental instructors, and licensed mental health care practitioners working in university mental health clinics provided a deeper understanding of this issue. This data will then be utilized in filling the present void that exists in our current understanding of how the issue of MPA is addressed in a small sample of undergraduate music schools, and may also become a catalyst for future research within this topic area.



There is no preexisting conceptual framework that has been developed or published on the topic of how undergraduate music schools address MPA, and one of the primary objectives of this research was to create a conceptual model of this process in the hopes that it may inspire further research and change. This conceptual model is presented here in a diagram that provides a quick visual reference of the multifaceted ways in which undergraduate music schools are currently addressing MPA (See Figure 9 below). One of the most distressing components is that MPA is not a normalized behavior that is openly discussed, and it continues to be accepted as part of the culture within undergraduate music schools. The conceptual model also shows that the current treatment strategies are one-dimensional and are primarily behavioral-based methods that are directed at the symptoms of MPA rather than its underlying causes. The other strategies category was included to show some of the other ways that MPA is addressed; however, these techniques are not currently in widespread use at the undergraduate music schools that were represented in the study.



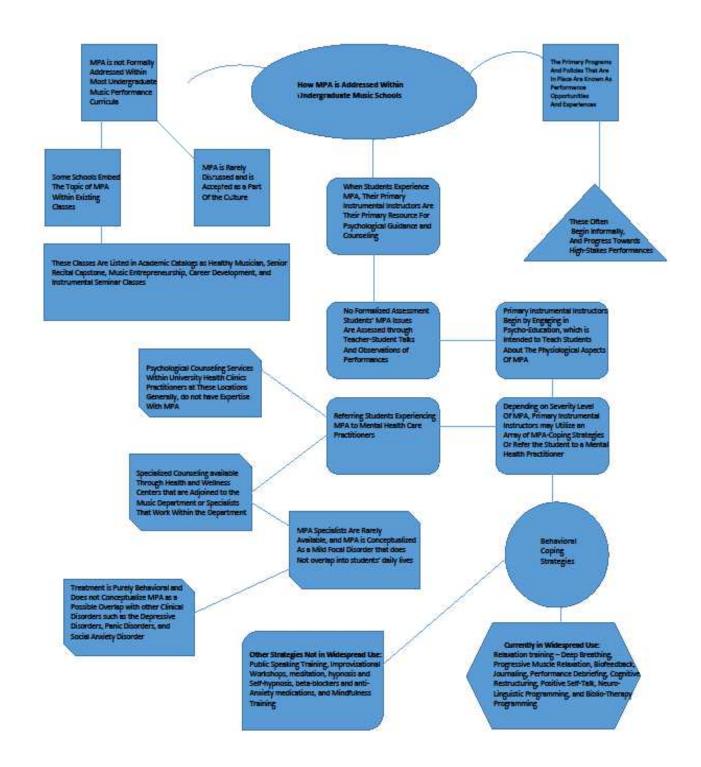


Figure 9. Conceptual Model of How Undergraduate Music Schools Address MPA.



Implications for Practice

One of the most compelling arguments that was highlighted in the research findings is the question of whether MPA should continue to be dealt with in a reactionary way where the individual's primary instrumental instructor assists students who experience MPA issues, or if undergraduate music performance curricula should include mandatory coursework that is focused on MPA and the psychology of music performance. Put another way, should schools continue to omit MPA within the formalized, mandatory coursework and deal with MPA issues individually as they arise, or would changing the music performance curricula to include mandatory and/or elective MPA-specific coursework provide a more preventative method to help undergraduate music students cope with their performance anxiety issues? This would be a dramatic change in the mindset of administrators within undergraduate music schools as the findings within this research suggested that an overwhelming majority of the schools that were represented in the study do not acknowledge MPA as a serious issue.

Another important implication of the research findings is that only two of the undergraduate music schools represented in the study provide students with psychological guidance from licensed practitioners who have expertise in MPA and the environment of high-stakes music performance. This suggests that undergraduate music schools could improve the way that MPA is addressed by ensuring that the licensed mental health care practitioners working within university mental health care clinics receive appropriate training on the topic of MPA and how it can impact music performance students. Another alternative may be to model the university that was represented in the research that has a center for performing arts health connected to its music school and provides students with access to mental health care practitioners who have expertise in treating MPA issues. It may also be



beneficial for undergraduate music schools to include a licensed mental health care practitioner within the department of music who has expertise in MPA and can work closely with students and their primary instrumental instructors. These strategies may help to ensure that students who experience MPA are provided with effective treatment and intervention strategies through the guidance of qualified mental health care professionals.

There were 12 schools represented in the research that rely on students' primary instrumental instructors as first-line responders to MPA issues, and none of these individuals have completed licensing or higher education training that ensures their competency for effectively assisting students with MPA issues. Research has demonstrated that there are high prevalence rates of MPA among music educators, and even though these individuals are not able to effectively cope with their personal MPA issues, these instructors seem to believe that they are qualified to mitigate its impact on their students (Patston, 2014). These findings suggest that undergraduate music schools may want to consider hiring specialists who are licensed and have expertise in MPA and the psychology of music performance to work directly with students who are suffering MPA-related issues. It is also plausible that undergraduate music schools could require primary instrumental instructors to participate in MPA and the psychology of music performance training workshops or licensing programs that would ensure that they have the required competencies to accurately and effectively work with students who are experiencing MPA.

Another important issue to consider for practice is that the findings were unanimous in regards to all of the individuals who participated in the study stated that they believed that more performance experiences equates to students' becoming more comfortable within the high-stakes music performance environment. This mindset is counterintuitive to the existing



research in this area and suggests that undergraduate music schools may want to re-evaluate the importance they are placing on performance opportunities as their key program or policy with which they are addressing MPA. Research findings have demonstrated that MPA levels increased from undergraduate students' sophomore to their junior years, and this suggests that performance experience alone cannot mitigate MPA issues (Patston, 2014). In light of this research, it may benefit undergraduate music schools to consider including some psychological coping skills training within some of their existing classes where the subject of MPA and the psychology of music performance topics are already embedded. Another option may be to provide mandatory workshops that are facilitated by qualified and licensed practitioners within the field of performance psychology where students can be trained how to effectively cope with MPA issues.

One of the recurring themes in the findings is that the MPA strategies that are currently in use at the undergraduate music schools that were represented in the study are one dimensional and merely attempt to treat the individual's MPA-related symptoms rather than probing deeper into the root of their issues. A great majority of the performance anxiety strategies that are currently utilized with MPA address its symptoms and neglect its underlying causes (Ginsborg, Spahn, & Williamon, 2012; Kenny, 2011). The findings suggest that having licensed mental health care practitioners who can provide therapeutic assistance available who are easily and discreetly accessible to undergraduate music students may be a step forward in treatment strategies. These individuals would be capable of conducting thorough assessments of students who present with MPA, and this may help to differentiate mild to moderate cases where psychological skills training techniques are all that is needed versus more severe cases where ongoing therapy is needed.



The current practices of the participants who participated in the research in regards to assessment of students with MPA issues indicates that is an area in need of improvement. The findings of this research study demonstrate that none of the undergraduate music schools that participated in the study utilize any kind of formalized MPA-assessment strategies, and incorporating this into undergraduate music schools may help identify students who are atrisk, thus allowing schools to be more proactive in how they address MPA. The standard practice of assessment that is currently in widespread use at the universities that were represented in the study is for students' primary instrumental instructors to talk with and observe students during their performances. Including tools, such as the Kenny Music Performance Anxiety Inventory (K-MPAI), would provide more specific data about the severity of each student's MPA levels, and may provide useful information that could prove useful in the development of more effective intervention strategies.

The findings also indicate that one of the most effective strategies for helping performers cope with MPA, preperformance routines, is not currently employed at any of the undergraduate music schools that were represented in the study. None of the primary instrumental instructors who participated in the research mentioned the use of preperformance routines as a strategy that they use when assisting students who are facing MPA issues. Research findings have demonstrated that the use of a preperformance routine that includes multiple cognitive and behavioral components lowers the risk of performance breakdowns or choking under pressure and has been found to be more effective than the use of individual mental skills techniques (Osborne et al., 2014). Developing the use of preperformance strategies that are individually tailored to the student and his or her specific issues may provide an effective alternative to the use of the singular psychological skills



strategies that are currently in widespread use at the undergraduate music schools that were represented in the research.

Another important implication for the research findings is that one of the key issues within MPA, declines in attentional focus, which is often at the center of performance deterioration, was not discussed by any of the research participants. Often, disturbing thoughts or focusing on task-irrelevant thoughts are cited by performers as key components of performance declines and the experience of MPA. Research findings have demonstrated that the use of attentional control training can be an effective strategy for addressing MPA by improving focus, lowering anxiety levels, and leading to improved performance outcomes (Oudejans, Spitse, Kralt, & Bakker, 2016). Combining this type of training with cognitive restructuring, which is already in widespread use among the undergraduate music schools that were represented in the study, may be an effective strategy for addressing students' MPA issues.

Recommendations for Future Research

There are a great many areas for future research to be conducted on the topic of how undergraduate music schools address MPA since little research has been published in this area. One area that warrants further exploration would be to conduct a study that extends the current study by including undergraduate music performance students within its sample in order to gain their perspectives of how their respective music schools address MPA. It would also be extremely beneficial to conduct a comparison study where students facing mild to moderate MPA issues participate in an experimental study. The sample could be equally divided into three groups, a control group, experimental Group 1 would participate in a one-day MPA workshop, and experimental Group 2 would participate in an 18-week class that



focuses on MPA and the psychology of music performance. Participants would complete the K-MPAI prior, during, and post-intervention. The K-MPAI was designed to evaluate the severity of a musician's level of performance anxiety and can be effectively utilized in the development of an effective treatment protocol (Otacioglu, 2016). This type of research could help to establish the efficacy of short-duration workshops versus semester-long classes in comparison to the control group who will rely solely on their primary instrumental instructors for their MPA guidance.

The findings of the current study demonstrate that among the undergraduate music schools represented in the study, performance opportunities and performance experience are regarded as the principle programs for ensuring that students are able to cope with the pressures of high-stakes music performance. Because the available research does not support this strategy of desensitization as having efficacy for helping musicians overcome MPA, future research should be developed and conducted at the undergraduate level. An experimental design that compares a control group of undergraduate music students who are fully reliant upon graded performance opportunities and performance experience would be compared to an experimental group that in addition to receiving the same performance opportunities and experiences would also participate in an 18-week comprehensive MPA training class where a wide range of psychological coping skills are taught and applied.

Comparing each of the groups' pre and post K-MPAI scores could provide data on the efficacy of performance opportunities and experience versus a group that also participates in a comprehensive MPA training class.

Another area that warrants further research would be to follow up on this study's findings in regards to the reports of clinical directors at university mental health care clinics.



Each of the clinical directors that were contacted for this study unanimously stated that undergraduate music students are not presenting to university health care clinics with MPA issues. A future study should be conducted with undergraduate music students to examine where these students are turning for psychological guidance.

Conclusion

How MPA is addressed within undergraduate music schools is a polarizing topic, and the findings of this research provide many divergent viewpoints among its participants. While the vast majority of the participants accept the need for change in strategies within their respective undergraduate music schools, there are also individuals who do not view MPA as a significant issue that requires changes to their respective school's music performance curricula. The available research, however, has continually demonstrated that over 20% of undergraduate music students experience MPA issues that are severe enough to have negative consequences for their academic progress and career trajectories (Osborne et al., 2014). It may also be germane to consider that within the culture of undergraduate music schools, prevalence rates may be higher due to the possibility that many students do not seek psychological help for their MPA issues.

During the recruitment process, I spoke to several clinical directors who oversee student psychological counseling centers, and I was told by all of these individuals that no students have ever presented to their clinics with MPA issues. Many of these clinical directors also admitted that they were not entirely aware of MPA and the implications it can have for music performance students. This suggests that even if students facing MPA issues are willing to seek psychological assistance, few of the schools represented in the study have mental health practitioners on staff within their university health care clinics that have



sufficient levels of expertise in MPA treatment. Only two of the schools represented in the study were able to provide students with psychological guidance from licensed mental health care practitioners who have expertise in treating MPA. This indicates that for the majority of undergraduate music students who attend the schools represented in the study, there is limited access to qualified practitioners who have expertise in the treatment of MPA issues.

The current methods that were found to be in place within the undergraduate music schools that were represented within the research all fit into the "treating the symptoms" category of MPA treatment strategies, and this suggests that these higher learning institutions view MPA as a mild focal condition that does not extend beyond the stress of the stage and into the student's personal life. While this may be true in many cases, it is important to acknowledge that MPA often exists with other comorbid conditions, such as social phobias, the depressive disorders, and panic disorders (Kenny, 2011). MPA symptoms can often signal the presence of other more serious clinical disorders, and it should not be taken lightly. During the data collection process, it was learned that one undergraduate music student, who had just graduated, committed suicide, and although the causes may or may not be attributable to MPA, this serves as a reminder that undergraduate music students experience many serious stressors that can have severe ramifications. The possibility that MPA may overlap with other clinical disorders and can be life-threatening should serve as a wake-up call to music educators and administrators and serve as a catalyst for changing the way that MPA is conceptualized in undergraduate music schools.

It may also be worth mentioning that utilizing MPA treatments that are primarily based upon behavioral strategies may not be sufficiently effective in helping students to overcome their MPA issues. Ginsborg et al. (2012) suggested that changing an individual's



cognitions can effectively minimize the physiological symptoms that are associated with MPA but recommended combining a diverse range of therapeutic disciplines, such as behavioral, psychoanalytic, and biodynamic for the most effective results. Within the undergraduate music schools that were represented in the study, only two of the schools offered students therapeutic assistance that extends beyond the behavioral strategies that are in widespread use. The findings suggest the importance of providing students with qualified mental health care specialists rather than relying on their primary instrumental instructors to provide therapeutic assistance.

In order to facilitate the changes that are needed at the undergraduate level, music schools may want to change the way that MPA is conceptualized. Rather than being thought of as a taboo subject that is just accepted as part of the culture and is not discussed, MPA needs to be recognized as a legitimate issue and something that likely impacts every musician on some level. Normalizing the behavior was a recurring theme among participants in this research study in regards to how undergraduate music schools can begin to improve the way that MPA is addressed. In much the same way that stigmatization has impeded the mental health field in general, undergraduate music schools and their students must first understand that seeking help for psychological issues is not a show of weakness. The act of seeking help is, in fact, a profound step that one takes towards overcoming the issues that impede growth, progress, and realizing one's most important objectives.

While many of the participants in this research gave voice to the recurring argument that including mandatory MPA coursework may not be the best solution to the problem because only a small fraction of students' experience MPA issues, the available research shows another perspective to this debate. The findings of survey research that included



collegiate music performance students indicated that 90% of participants were interested in getting help with their anxiety issues (Schneider & Chesky, 2011). This lack of congruence between students' needs and the perspectives of music educators and administrators on what is needed to effectively address MPA within undergraduate music schools is an important consideration. The pressure of music performance impacts every student-musician on some level, and including MPA-specific classes into the curricula would ensure that every student learns how to cope effectively with the stressors of high-stakes music performance.

Undergraduate music schools can move the discipline of music education forward by taking steps towards developing a more holistic curriculum that transcends the notes on the printed page, the technical skills that are required to attain virtuosity on a given instrument, and the musical theory and knowledge that are each essential to musicianship, and they can begin to expand the musical pedagogy into an area that fully develops music scholars into confident performers that have the ability to regularly experience peak performances under the pressures of high-stakes music performance. Doing so would help to ensure that professional music education takes into consideration that the end goal of a music performance degree is to help students become professional performers who are capable of greatness even under the intense pressures that often exist in the performance environment. In the words of one of the participants in the research, *How do we know if the world's next Coltrane or Chopin will simply drop out of music entirely as a result of not being able to cope with his or her MPA issues?*

Ultimately, the findings of this research should relate back to the students themselves as it is their well-being that is important, and music educators should be aware of the unique stressors that all undergraduate student-musicians face. They should also be aware that for



many of these undergraduate music scholars, a great deal of their sense of self-worth and personal identities are directly related to their ability to showcase their talents on their instrument of choice. For many musicians, there is a blurring on lines between their personal identity and their musical identity, and this high level of personal investment in their musical capabilities makes this population especially prone to experiencing MPA (Kenny, 2011). Undergraduate music schools have a responsibility to the discipline of music education, its students, and ultimately, the art of musical performance to elevate the manner in which they address the issue of MPA, and develop new curricula that transcend the traditions of the past and drives modern music education forward.



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Appendix A – Permission to Include Diagram of the Conceptual Framework of MPA

Dear Craig,

Thank you for your email and interest in the conceptual framework.

Provided that the work is cited, I have no problem granting permission to include it in your proposal.

Best of luck with your PhD!

Kind regards,

Ioulia

Dr Ioulia Papageorgi

PhD FHEA

Assistant Professor

Director – University of Nicosia Teaching and Learning Institute (UNTLI)

Program Coordinator – MSc Educational/School Psychology

Department of Social Sciences

University of Nicosia





Dear Colleagues:

Participate in a qualitative research study examining how undergraduate music schools address music performance anxiety (MPA).

Eligible participants are generally faculty members who work within undergraduate music schools in roles that require them to assist in the development and/or design of music performance curricula or may provide psychological guidance to students who experience MPA issues. Participants will take part in a short, confidential Skype or telephone interview, and the findings will be used in the development of a conceptual model of how MPA is addressed within undergraduate music schools.

Please contact the researcher here: if you are interested to be part of this much-needed research.



Appendix C – Semi-Structured Interview Protocol

Prior to engaging each participant with the interview questions, the interviewer will initiate interviewer-interviewee rapport by taking a few moments to use an icebreaker statement with the participant. The interviewer will also restate the confidentiality clause that is included within the informed consent document in order to reduce participant apprehension.

Following this protocol will help to ensure the accuracy of data that will be obtained during the interview process. The interviewer will then commence with asking the relevant questions based upon the participant's job title within the undergraduate music school leaving ample opportunity for each participant to fully address each question.

Questions for Curricula Administrators:

- 1. What are your thoughts on how your undergraduate music school addresses MPA issues among its students?
- 2. What programs and policies, if any, are in place to help ensure undergraduate music performance students learn how to effectively cope with MPA issues?
- 3. What mandatory coursework is focused upon the psychology of music performance that all undergraduate music performance students are required to complete? What are the elective psychology of music performance coursework options that are available to students?
- 4. What is the process involved in designing the curricula that students are required to complete in order to graduate with an undergraduate music performance degree?
- 5. How does your university ensure that undergraduate music performance students are provided with sufficient training that enables them to effectively cope with MPA?



- 6. Explain any obstacles that may be causal in preventing your music school from improving the way in which MPA issues are addressed in the classroom.
- 7. What professional competencies are required of faculty members who currently facilitate classes or workshops that are designed to help students to cope with MPA issues?
- 8. What academic policies and programs do you believe are most effective in addressing students' MPA issues?
- 9. What types of changes to the undergraduate music performance curriculum at your university do you feel would improve the overall manner in which MPA is addressed?
- 10. Aside from formalized classes that are required or elective within your undergraduate music performance curriculum, what other resources are available to students who are suffering from MPA issues?

Questions for Primary Instrumental Instructors

- 1. What types of strategies do you utilize when students approach you with MPA issues?
- 2. When a student presents with MPA, what types of assessment tools do you use to determine the severity of their issues, and in more severe cases, what are your thoughts on referring the student to the university psychological counseling center or a specialist?
- 3. In what ways does the music performance curriculum at your university help students to cope with MPA issues?



- 4. How effective do you think it would be to introduce a workshop that is focused on teaching students MPA coping strategies strategies would be?
- 5. What are your thoughts on including coursework that focuses on the psychology of musical performance into the music performance curriculum at your university as a way to help students effectively cope with high-stakes musical performances?
- 6. What types of training, education, or experience do you have that contributes to your ability to provide psychological guidance to students who experience MPA issues?
- 7. Why do you think that the majority of undergraduate music schools fail to address MPA in their music performance curricula?
- 8. What types of changes to the music performance curriculum at your university do you feel would improve students' abilities to cope with MPA and high-stakes music performances?
- 9. Is there anything else that you would like to add that you feel would be relevant to my investigation of how undergraduate music schools address MPA?

Questions for Licensed Mental Health Professionals Working in University Mental Health Clinics:

- 1. In your view, what are the most effective strategies that can be utilized within the classroom to help train students to cope with their MPA-related issues?
- 2. From your perspective, how well does the undergraduate music performance curricula sufficiently prepare students to handle the pressures that are associated with high-stakes music performances?
- 3. What are the specific individualized MPA intervention strategies that have been effective in your work with those students experiencing significant MPA issues?



- What types of group intervention methods do you feel are particularly effective in helping students overcome MPA issues?
- 4. What types of changes to the undergraduate music performance curriculum at your music school do you feel would improve the overall manner in which MPA is addressed?
- 5. Explain the obstacles that you feel are currently preventing the undergraduate music school from making improvements to the way in which MPA issues are addressed?
- 6. What are your thoughts on screening incoming students utilizing reliable and valid MPA measures for the purpose of identifying students who are at an elevated risk for experiencing MPA issues and using this data to determine placement into required MPA-related therapeutic coursework?
- 7. In regards to assessment and diagnosis of undergraduate students experiencing significant MPA issues, how often do these students experience comorbid disorders such as SAD, GAD, panic disorders, or depression disorders?
- 8. Is there anything that you would like to add in regards to how university mental health care clinics can better assist students who experience MPA issues?



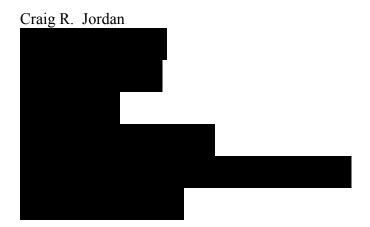
Dear University	

My name is Craig Jordan and I am a PsyD candidate at the University of the Rockies located in Denver, Colorado. I am currently working towards completing my dissertation, which is the purpose for this letter. The multiple case study research proposal that I have developed is designed to examine how undergraduate music schools within the United States address the topic of music performance anxiety (MPA) among students. In order to conduct this research, I am interviewing curricula administrators who are responsible for the development of undergraduate music performance degree programs along with faculty who are primary instrumental instructors and provide psychological guidance to students, and, where applicable, licensed mental health care professionals working within university mental health clinics who have experience providing therapeutic assistance to students who experience MPA issues. I am requesting your university's permission to contact and interview individuals who hold the aforementioned positions within your university and have at least one year of experience in their current position.

Semi-structured interviews will be conducted confidentially via Skype or phone, and the interviews will not exceed more than one hour in duration. The interviews will also be digitally recorded in order to develop word-for-word transcripts that will allow me to accurately code and analyze the data. Curriculum administrators will be able to provide information in regards to how MPA is addressed within the undergraduate academic program requirements, and primary instrumental faculty and licensed mental health care professionals can provide information about what types of individual and group treatment strategies are in use at your university. A short follow up session via Skype or telephone will be optional for participants who find discrepancies in their provided interview transcripts and the intended meanings of their responses.

Please sign below and return this document to me electronically in order to grant your permission to contact and interview the appropriate individuals who are employed within your university. It would also be appreciated that you supply the researcher with the appropriate contact information of the individuals who currently hold the positions of curriculum administrators, primary instrumental instructors, and licensed mental health care professionals employed at your university.

Your time and consideration is greatly appreciated.



Dr. Mark Arcuri



The University of _______ hereby grants Craig R.

Jordan, PsyD candidate, the University of the Rockies, permission to contact and interview curriculum administrators and psychologists employed within our institution of higher learning for the purposes of completing the aforementioned dissertation study.



	(Printed Name and Administrative
Title)	
	(Date)
	(Signature)
	aployees Who Are Currently Employed as Curricula Workers Within Your Undergraduate Music School:
Name	Contact Information
Name	Contact Information
IRB Approval Number: 16-0022-0	IRB Expiration Date: April 20, 2017



Appendix E – Participant Informed Consent Form Cover Letter

Date:

Dear:

Thank you for deciding to participate in a research study that is designed to examine how music performance anxiety is addressed within undergraduate music schools. This study will utilize interview data with undergraduate music school curriculum administrators, primary instrumental faculty, and, where applicable, licensed mental health care professionals working within university mental health clinics who provide treatment to students with music performance anxiety (MPA) issues. The attached informed consent document will provide detailed information about the research study and your role as a participant. Once you have fully read and understand the information, please sign and date, and return this form to me electronically. I look forward to working with you.

Respectfully,

Craig R. Jordan



How Undergraduate Music Schools Address Music Performance Anxiety: A Multiple Case
Study

Researcher: Craig R. Jordan

School of Professional Psychology

University of the Rockies

Doctoral Candidate

Dissertation Chair: Dr. Mark Arcuri, University of the Rockies

Prior to engaging in voluntary participation within this research study, you are required to read, sign, and return the completed form to the researcher electronically. Only after completing this requirement will you be eligible to participate in a semi-structured Skype or telephone interview. By signing this document, you consent to voluntarily participating in a Skype or telephone interview that will be digitally recorded, which will allow the researcher to transcribe, code, and analyze the data. Your name and the name of your university will remain confidential and will not be published within the dissertation document or any related publications or presentations related to this research.

Explanation of the study: This research study will examine the prevailing strategies that undergraduate music schools utilize to address music performance anxiety (MPA) issues among students. You have been selected to participate based upon your expertise and professional experience, and your perceptions and insights into this topic area will help in determining the prevailing methods for addressing MPA within undergraduate music schools



in the United States. As a participant, you will take part in a semi-structured interview with questions pertaining to:

- what policies and procedures are in place within your music school to address students' MPA issues,
- how undergraduate music performance curricula are developed,
- how music performance curricula have changed in recent years to better address
 MPA,
- what obstacles you feel may prevent undergraduate music schools from implementing more comprehensive strategies to address MPA,
- how well you believe your university addresses MPA issues,
- and your perceptions of changes that you believe would improve how your music school addresses MPA.

The interview you participate in will be conducted via Skype or telephone and will be digitally recorded. The minimum duration of the interview will be 30 minutes and shall not exceed 1 hour. It may also be necessary for a follow-up session via Skype or telephone to provide clarification for your responses if you feel that the transcripts of your interview do not accurately convey your intended thoughts.

Benefits of participation: Although participation may not directly benefit you or your university, your insights will help to establish the existing methods that are used to address MPA within undergraduate music schools in the United States. The data gathered within this research study would serve to benefit undergraduate music schools, their students, and sport and performance psychologists by developing a conceptual model of how MPA is addressed among a diverse range of undergraduate music schools within the United States.



Confidentiality: Your identity and the undergraduate music school that you represent will remain confidential and will not be published within the subsequent dissertation document, any other publication of the research, or presentations of the research. Further, the interview transcripts will not be included in the appendixes of the dissertation. I will maintain your confidentiality to the best of my ability unless required to reveal this information by law. In order to complete the participation requirements for this study, please date, sign, scan, and email it back to the researcher. Participants' consent forms will be kept in a secure area separate from the digital recording and interview transcripts. Interview transcripts and raw data will be kept in a secure file cabinet for a duration of five years following the approval of the dissertation. After five years, the raw data from the interviews will be destroyed by the researcher. Transcripts of the interviews will be shredded, and the recordings of the interviews will be erased from the computer database using a Softpedia application known as permanent eraser for Mac that utilizes the Gutman Algorithm to ensure that data cannot be recuperated.

This study has been reviewed and approved by the University of the Rockies
Institutional Review Board (IRB). The IRB has determined that this study meets the ethical
obligations required by federal law and University policies. If you have questions or
concerns regarding this study, please contact the researcher or the dissertation chair.

Researcher: Craig Jordan



Dissertation Chair: Mark A. Arcuri, PhD

If you have any questions regarding your rights as a research subject, please contact IRB@rockies.edu.

Your rights as a participant: Your participation in this study is completely voluntary, and you may choose not to participate. You are also free to withdraw from this study at any time with no penalty to you. In order to withdraw your participation prior to or following the interview process, simply email the researcher to complete your request. Upon receiving a withdrawal from participation request, all of your identifying information and interview data will be destroyed.

Following your participation in the above research study, you will be provided with a word-for-word transcript of the questions and your responses to these questions as a check for accuracy. These transcripts will be emailed to you 1 week after your interview is conducted. If for any reason you feel that your responses are portrayed inaccurately, please contact Craig Jordan at the above email address. A short follow-up interview via Skype or telephone will then be scheduled in order to allow you the opportunity to clarify any inaccuracies that exist within the interview transcripts or to provide contextual information. I hereby acknowledge that I fully understand the contents of this document, and voluntarily consent to participate in the research. I also attest to being at least 18 years of age. After



signing and dating this form, scan ar	nd return it electronically to the r	esearcher, and print a
copy for your personal records.		
Signature of Participant:		Date:
IRB Approval Number:	IRB Expiration Date:	